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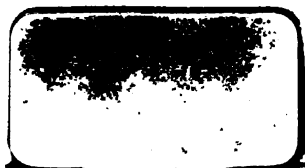
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4. *History of Scotland.* By PATRICK FRASER TYTLER, Esq. 9 vols. Edinburgh, 1839-1843.

THE numerous volumes that are almost daily spawned, relative to the days of Mary Stuart, proclaim the undying interest of the world, in one of the most extraordinary portions of its history. Old and young, male and female, foreigner and native, the didactic historian, the writer of memoirs, the collector of letters, and the general "gatherer of other men's stuff," have poured forth their sense or nonsense upon the prolific theme. Each too has some peculiar merit; each professes to give the correct story; each has made some grand discovery hitherto overlooked, or struck out some philosophical views, around which the sluggish imaginations of his predecessors had toiled in vain. Mr. L. Stanhope F. Buckingham gives "a personal memoir of the Scottish Queen, embracing, what none had done before, the essence of that long and vehement controversy;" and he "combines together, for the first time, the personal incidents of Mary's remarkable and romantic career." To set opposite to such high recommendations, Miss Strickland appears laden with "correspondence new to the public; and that which is not absolutely so, is now for the first time presented in a collective form, and

in language comprehensible by the general reader." Her volumes contain, too, "other letters and contemporary records of equal interest, many of them hitherto inedited, and for the most part translated for the first time." Mr. Turnbull partly admits, and partly denies this; Miss Strickland's book contains, according to him, many omissions, and is wretchedly translated; his own being the genuine article. Mr. Tytler again, has traced the history "with greater detail than former writers," seeing that "he had access to a large mass of manuscript materials, of which the greater part has been hitherto unprinted and unexamined;" and he has thus been "enabled to throw more light upon this division of the work, and to recover from the waste of conjecture and obscurity, some portions of Scottish history which were lost."

"The work," says Dr. Johnson, "is performed, first by railing at the stupidity, negligence, ignorance, and asinine tastelessness of the former editors, showing from all that goes before, and all that follows, the inelegance and absurdity of the former reading; then by proposing something, which to superficial readers would seem specious, but which the editor rejects with indignation; then by producing the true reading, with a long paraphrase, and concluding with loud acclamations on the discovery, and a sober wish for the advancement and prosperity of genuine criticism." Amid this eternal war, we have had dissertations recommended neither by their interest nor their moral utility, though truth has sometimes been struck out from the collision of discordant opinion. It is difficult indeed to write the history, or to read it, without sliding into the spirit of partizanship. When one seeks to preserve the cool impartiality of literary judges, and to treat the story with the indifference of stoical impartiality, an under-current of feeling rises to the surface of our thoughts, on which all our philosophy floats away. It is in vain that we recall the great interests that were involved, or the mighty convulsions of those old days, which centuries only laid at rest. Other influences put to flight sobriety of thought; imagination renders the past contest of party, a struggle of the present; and the reason is checked in its duty of censure or of praise.

The forty-five years from the Reformation in 1560, to the union of the crowns in 1605, is crowded with incidents for the politician, who wishes facts for any theory, or for the moral philosopher who wants examples to illustrate his general speculations on the virtues and infirmities of humanity. For men of softer natures, there will not be found a page of history, so calculated to rouse the contending emotions of admiration and astonishment, or to wound sensibility by horror and indignation. They have a subject inexhaustible in extraordinary revolutions in opinion, and terrible reverses in fortune, when the worn-out prejudices of the middle age slipped from life to history, and

families who had flourished through ages of prosperity, were pushed aside, and were heard of no more. It is a noble theme for a historian who can estimate its spirit. It affords him scope for his highest powers of graphic narrative, or his profoundest reach of philosophical reflection. All the wonders are here that imagination would have created, had it left itself untrammelled to create a story in the precincts of times, of the events of which there is no record. Everything to excite attention by pleasing variety, to instruct the mind not by speculation but by example, and to meliorate the heart by a story which will never fail to find sympathies there.

Unhappy Mary! over whose sad story of unequalled misery no philosophy can prevent the tears of sensibility to flow, and no difference of creed can stifle the compassion of humanity at fallen greatness. What a long Iliad of woes was that life, chequered with self-implemented miseries—a life which blazed with so much lustre at its opening, and went down amid such clouds of sorrow. The scene of rapid change passes before us with a speed that hides the connexion between each Act of a drama, where princes were the players, and the spectators the world. The proclaimed queen of three great nations was, in a few little years, driven from her home in the noon-day of her youth and beauty, with cries of vengeance echoing in her ears, and a long captivity and ignominious death awaiting her at last. The coldest nature, and the most cynic philosophy, will admit that there is something touching in the story of a girl who had the warm affections of a kind heart, and all that we ever associate with human loveliness; whose errors were the result of no native depravity, but which met with so speedily and dreadful a reckoning.

History and tradition, and impressions which are transmitted from age to age by a medium imperceptible to analysis, have, in one mode or another, done their best to satiate human curiosity. We can follow Mary, step by step, from the first outburst of admiration of the cavaliers of France,

“ In life’s morning march when her spirit was young,”
to her melancholy end. We know her life as thoroughly as we can ever know the past; her story sinks into the mind and nestles there like some of the nursery tales of early childhood, that come rising up from their long hiding place, when, amid the rugged scenes of life, the chord is struck that sends us back upon reminiscences.

We read the strange history again and again, and as each stirring incident appears, one can scarce imagine himself engaged in the study of things that once agitated human hearts, and had been productive of real destinies. Genius has contrived to weave out of it a tale; but how tame has even Schiller made

the copy, and how vapid is Scott's narrative beside the truth! Her own letters tell her history, with a dreadful sincerity and mournful pathos, that has never been surpassed by the best passages of the masters who have portrayed the workings of a wounded and distempered heart. Not so, however, with our manufacturers of memoirs, biographies, and dissertations. The endeavour with them has been, not to expiscate the truth. That would have been an idle and a useless task. Theory here makes sad ravage with history, under the guidance of a logic which stalks to its conclusions with an irresistible contempt of facts. The ordinary sources of past history are too narrow for their warm and enthusiastic imaginations. We are now to deal with writers who fly *extra flammantia mœnia mundi*, into the regions of conjecture. Laden with the stores acquired by imagination in its travels, they are positive and decided even on unattainable knowledge, and can develop at once the glories that are fallen, and invest with a superior pomp the beings they exalt, or correspondingly depress the villains, conspirators, and fanatical desperados they condemn.

It is not one point that these writers and their predecessors have involved in doubt. They compel controversy to attend Mary from her cradle to her grave, and render her story one of those unhappy subjects that can only be looked at from the extremes of human feeling. We scarce leave with moistened eyes the tale of suffering unmerited, and the good points of character exaggerated to falsehood, when our hearts are turned to stone at the narrative of crime unpunished, humanity trampled on, and the decencies of life outraged and despised, in the wild gratification of flagitious passion.

The Letters of Queen Mary, with which Miss Strickland has favoured us, are a selection from several tomes, put together by the industry of Alexander Labanoff, a Russian prince. Those that are new are of no great importance. Aware of this, Miss Strickland has interweaved with them a number of the interesting letters long ago published by Robertson and Keith, and has endeavoured to render her story connected by a short abridgment of Mary's history. To the whole she has prefixed a long introduction, and added many pages of appendix, and, by writing several times of her intentions in regard to "future editions," she indicates her opinion, that her own high estimate of her labours will only be in unison with that of the public.

The public are sometimes blind, and often capricious; but, in the present instance, we are afraid that such sanguine anticipations will be disappointed. We would wish to speak with all gentleness of a lady, and to pass over in silence, if we could not approve, the productions of her genius. But Miss Strickland's is

a special case. She is a practised authoress, who favours the public, as each revolving lustrum passes, with thick volumes of history, which have a certain circulation, and necessarily exercise a little influence. She is, moreover, not unaccustomed to criticism; and in the present case, by her assumption of excellence, and by the tone and temper in which she writes, she has resigned the privileges which we would otherwise be the first willingly to concede.

Speaking of the accusers of the Queen, Miss Strickland has well observed, that "they would have been wonderfully improved by the castigation of our present periodical press,"—(vol. iii., p. 255,)—an observation which we cite here with the view of justifying ourselves in giving a few specimens of her capacity for historical investigation, and in assisting her in the labour of revision for those numerous editions that will be called for by an anxious public. Some of the points we have noticed, in the cursory glance we have given to her volumes, may be considered unimportant; but in a work destined to such a wide popularity, it is best to be correct in regard to every particular.

We are informed very early, that "the divorce of Bothwell from Jane Gordon, sister of the Earl of Huntly, was declared at the same time in the Consistory and the Archiepiscopal Court," (vol. i., p. 33.) Both were Consistory Courts; and Miss Strickland means to say, that the divorce was carried through in the Consistory Court of the Archbishop, and in the Consistory Court of the Commissaries. In the next page, she writes of something having been done "in presence of the Lords of Sessions," (p. 34.) A strange use is made of Parliament in another place, for "the Queen convokes a Parliament in order to bring to trial" the murderers of the King, (p. 28.) Rizzio's murder took place "in the drawing-room of the Queen at the *Castle of Edinburgh*," (vol. i., p. 226.) Mary, on her arrival from France, "disembarks at Leith, having escaped the vessels of Queen Elizabeth, which, however, took one of her galleys. Having made a short stay at the *Abbey of Lislebourg*, she proceeds to Edinburgh," (vol. i., p. 7.) Lislebourg was the French name for Edinburgh, as it was then surrounded by so many lochs. The Queen, therefore, first "makes a short stay at" Edinburgh, and then proceeds to Edinburgh! "Mary appoints James *Murray* (her natural brother,) and Maitland, her prime ministers," (vol. i., p. 7.) This, we presume, is James *Stuart*, *Earl of Murray*. After the battle of Carberry Hill, "the tyrants took her (the Queen) to the Kirk-at-field, and shut her up in the house where her husband's corpse had been carried, after his murder, and had laid till his burial," (vol. iii., p. 28.) The Queen was first taken to the Provost's house, and then carried to Holyrood Palace—(Tytler, vol. vii., p. 112,)—which evidently affords no room for heroics

against the tyrants. "Lady Douglas" (at Lochleven,) "treated the captive Queen with the utmost indignity, telling her she was but a mock Queen, and that she had usurped the Crown from the Earl of Murray, who, she said, was in reality the right heir, boasting that she was the lawful wife of James the Fifth."—(Vol. iii., p. 29.) There is not a word of this in history. Bothwell, it appears, "was turned of fifty, coarse and ugly."—(Vol. iii., p. 124.) It is one of the points long ago incontestably settled in this controversy, that Bothwell was not thirty when he married Mary.—(Hailes, vol. iii., p. 80, ed. 1819.) What is meant in another place by "later documentary histories of the *minutes* of the Scottish Parliament and English Privy Council," we have been totally at a loss to comprehend.—(Vol. iii., p. 273.) How a history can be other than documentary, no dictionary will explain; and where such a history, or any other history of the *minutes* of the Parliament or Council exists, we humbly hope Miss Strickland will inform us.

These specimens will display the character of Miss Strickland's labours in the thorny field of Scottish history. We have confined ourselves to a few improvements of her own; but with regard to those of other people, she certainly shows that there is no opinion, however incredible or absurd, that, having had a parent, will die for want of a nurse. When she leaves narrative for philosophy or speculation, we have the Reformer denominated, with fluent flippancy, as "Master John;" and the whole population of Scotland dismissed with contemptuous epithets we need not cite. To dwell longer upon such an effusion, would be to honour it beyond its worth; and we have only noticed it, from the circumstance, that the lady has "in preparation, a personal memoir of Mary Queen of Scots, which in due time will be forthcoming."—(Vol. iii., p. 1, *Preface*.) We implore Miss Strickland to remember, in the rapid concoction of her "histories," that the patience of the public is not illimitable, and that her unhappy reviewers would wish, if possible, to be the first to herald the praises she expects; but that, if unmindful of the fact, that bad books—bad in style, erroneous in facts, flippant and superficial—are public nuisances, she will learn from the exposure to which they are doomed, that there will be no "future editions," to writers who have only half intelligence on subjects on which they publish volumes, joined to the vanity of knowing everything without study, and deciding on everything without information.

But the work of Miss Strickland is one entire and perfect chrysolite, in comparison with the "*Memoirs of Mary Stuart, Queen of Scotland*, by L. Stanhope F. Buckingham," who, we presume, is of the masculine gender, as he often quotes Latin,

and is once learned in Greek. This gentleman's performance is no dry marrowless anatomy. From the beginning to the end of his story, his tears never cease to fall. He is in a continual state of thaw and dissolution; and while the one hand was tracing the sorrows of his heroine, the other was busily engaged with a cambric handkerchief. The author intends to overwhelm us with sentiment and with eloquence; and figures arrayed in most fantastic drapery dance in his volumes, in the finest style of metaphorical confusion. The heavens are rent with the thunders of Jove; Neptune raises commotions in the deep, and Pluto in ecstasy leaps from his throne. Aeronautic flights are taken into the cloudy regions of sentiment, amid the mists of which we have often found ourselves hopelessly lost. The Minerva press never issued a work which, in its sympathies, has a more diffusive benevolence. Not Mary's sorrows alone lacerate the author's heart; but every thing, animate and inanimate, that belonged to her—her letters, her chairs, her poodle, are canonized! Matters of fact are tortured with a kind of juvenile ingenuity, and the remark of Addison nearly holds true, as to this as well the other productions of the same school, that "it is impossible to carry on a modern controversy without the words scribbler, liar, rogue, rascal, knave, and villain." There is, in truth, nothing so inexpressibly tiresome, as to travel through the mouthing passages, winding out in immeasurable longitude to nothing. "Treading the crude consistence half on foot, half flying," we rise from it with the same sensation of utter weariness, and the same dreamy idea of Mary's history, and of the doings of the villains who beset her, as one would have if, under the influence of nightmare, the whole had been exhibited in the misty phantasmagoria of a dream. We give one sentence as to the swamping of a boat belonging to Queen Mary, as a specimen of the author's admirable style:—

"Scarcely had she set foot on board the vessel, which was to convey her away—hardly had the oars of the galley-slaves kissed the cresting waves, when a vessel, mistaking the current, foundered in her sight, and most of the mariners, after a vain struggle, were drowned in the angry flood."—(Vol. i., p. 50.)

The rest of the work is equally eloquent and beautiful; and if its merits were thoroughly understood, it would become universally admired by—boarding-school girls.

Of Mr. Turnbull's performance, our space prevents us from speaking in detail. We understand that he is a Scottish lawyer, and hence, perhaps, the more intimate knowledge he possesses of the subject on which he writes. If we meet with little maudlin sentiment in his pages, we are treated often enough to strong expressions. He appears to hold somewhat of the philosophy "that

a terrible oath, with a swaggering accent, sharply twanged off, gives manhood more approbation than ever proof itself would have earned him," and hence the nonsense as to "the satanic malice" of the Queen's enemies. Mr. Turbull's pages show that he did not need to resort so much to this forcible feeble style, for, among all the modern publications relative to Mary Stuart, his with all its extravagance, is the most readable.

But we now come to a work which, in part, we have already considered,* and which demands attention in a loud and lofty tone. Our standard history cannot be passed over like the ephemeral publications of the hour. Respect for the labour spent in its preparation, gratitude for what measure of merit it displays, and the knowledge that it must exercise an important influence on the public mind, require that it should be patiently examined, and its character only estimated after the clearest proof. The portion of Mr. Tytler's History we proceed to notice, was one beset with difficulty. It is the *pons asinorum* of Scottish history. To him especially was it a bridge over which it was difficult to travel, as he came to it laden with the inheritance of his grandfather's opinions, as contained in a book which he recommends as the best exposition of the subject, but which the public, coinciding in the opinion of Malcolm Laing, has long ago declared to be the superficial work of a man, who, with more than usual confidence, brought to his task little of the industrious learning that rendered the labours of his predecessors enduring, or the vigorous writing that saved them from oblivion. With such feelings and such opinions, it is easy to anticipate the spirit of this history; though a work professing to be impartial, may vary the plan of execution. The Reformation, as seen in the pages of Tytler, appears a reckless and uncalled-for overthrow of the ancient institutions of a land, which, under their protecting shade, had become renowned in Europe. Calmly emerging from the general darkness that overspread the world, its necessities did not require, as its people did not demand, a convulsion so pregnant with immediate disaster and calamity, so doubtful with regard to ultimate advantage, and which was hurried through to gratify the selfish rapacity of the nobles, aided by the extravagant enthusiasm of shrieking fanatics, who imagined their madness to be inspiration. But it is not so much a falsification of facts, as a perversion of motives, with which the history is chargeable. The language employed to designate the Reformers—nobles, clergy, and people—is usually that of cool contempt. Where a direct charge could not be advanced, the most galling and unanswer-

* North British Review, Vol. iii., p. 345.

able of all reasoning—a sneer, is resorted to. “Who,” says Paley, referring to the mode in which Gibbon attacked Christianity—“who can answer a sneer?” While Mr. Tytler, for example, refers to the religious establishment as “the *Church* of Scotland,” before the Reformation, he never mentions it after that event, but as “the *Kirk*.” To be consistent, however, he ought to have treated us, at intervals, with some of the Doric of our Roman Catholic Fathers, whose virtues, he thinks, we would purchase cheaply by their fate. Yet they addressed their Sovereign as “the Queen’s heichness,” and celebrated Papal sovereignty as “the mightiness of the Paip.” It would not lessen their fame one jot in the estimation of the world, as it has not that of their successors, that their words did not flow in the mellifluous music of polished life, and that in the infancy of European language, they partook of the general and prevailing barbarism.

The opening scenes of the Reformation have afforded ample scope for much fiery declamation, and much feeble argument. The history of the Regency of Mary of Guise, has been composed upon the principle of one-sided advocacy of all her measures; her persecution of the Protestants—her violations of treaties and of truces—her dissimulations, artifices, and devices—her determination, against her own better judgment, to carry out in Scotland the policy of the Guises, and to subject it in everything to French domination—are studiously kept in the background, and where incapable of defence, have been subjected to censure diluted. Her ultimate deposition, when patience was exhausted, and when no treaty or obligation would bind, has been denounced with unusual vehemence as “unconstitutional and illegal,” (vol. vi., p. 89);* and the feelings of the historian urge him to advance principles, which are the very excess, the jacobinism of tyranny. If we have read aright the history of Eastern despotism, we believe it to be a principle of government there, that the deposition of rulers by their people can receive no sanction from divine or human law; and travellers relate, with words of pity, that amid the snows of Russia, and in other regions of the world, principles equally barbarous are recognized. This, however, was never either the theory or the practice of the people who called the House of Stuart from among the private nobility, or the House of Hanover from the German marshes, to the throne of a great empire. It has ever been a sacred principle among them, that as soon as a ruler gave clear evidence that he was prepared to illuminate the country with the fires of martyrs to freedom or religion, to violate solemn treaties, and render the securities of the nation’s privileges an idle name, he had forfeited the throne

* We cite the 2d edition.

whose prerogatives he had abused. The people of Scotland have never on this subject been less energetic in their language than in their actions. While the English Parliament could only utter a shrill and feeble cry that James the Second had *abdicated* the throne, the Scottish Parliament spoke out, with the unsophisticated bluntness of a free people, the wholesome lesson to the crowned despots of the world, that he had "*forfeited*" by his crimes, the inheritance given to his fathers. By whomsoever the law is violated, they have ever maintained, that resistance is the duty of the oppressed. It is so laid down by Paley and by Locke —by all the masters of the science, at whose feet Mr. Tytler or his reviewers would be content to be disciples; and Burke, in the warmest fury of his declamation, never denied the principle, though he disputed the application of it by the sans-culottes butchers of revolutionary France.

Mr. Tytler is not at home on any great question of constitutional government. The leviathan here does not combat in his own waters. A border foray or a deathbed are the things on which he excites our enthusiasm, or depresses our hearts with overpowering sadness. Although the Regent had leagued herself to men and measures abhorred by a people nearly unanimous, and proceeded to annihilate the national independence, while she crushed the national religion; and while that very Regent, a stranger to the country over which she ruled, derived all her authority by voluntary grant of the men who took it from her, we have the historian telling us, that her deposition was "a violent and unprecedented measure, an act of open rebellion; and to attempt to justify their proceedings under the allegation that they were born councillors of the realm, was a specious but unsound pretext."—(Vol. vi., p. 146.) And this statement is made by a writer who had composed many volumes filled with the history of the decline and fall of dynasties, and who had precedents, in every year of every reign he chronicled, for the just or unjust resistance of the mandates of the Scottish kings. To complete Mr. Tytler's picture, it was only necessary to be silent on the moderation of the rebels. The prejudices of honest Keith allowed him a wider liberality. *He* did not conceal the reluctance of the Reformers to proceed to the remedy of deposition; *he* tells the history of their many overtures for conciliation, and how, when backed by an army, they offered complete submission, on the simple condition of toleration for their religion.—(*Keith*, 268.)

Not only have the proceedings of the Reformers in their intercourse with the Regent been caricatured, but after her short unhappy reign was done, and death had closed her triumphs and her defeats, the historian carries along with him the same acerbity of style. The whole history of that celebrated Convention, which, in Edinburgh, in 1560, decreed the downfall of Popery,

has been traced in gall and wormwood. It is represented to be as illegal in its origin as it was violent and ferocious in its decrees. Let it be remembered that the Parliament so denounced, met in consequence of the solemn treaty which closed the war, and that this formed the first and fundamental condition of the peace. The whole nation was aroused; the struggle had displayed the weakness of their oppressors, and in such a time opinions were not silent on their rights as the citizens of a free state. Expectation beat high as to the issue of a meeting, which was attended by all that could lend it honour by ancient nobility of descent, or inspire confidence by private worth. It had to guide the fury of popular commotion, that it might not sweep away in its indiscriminate violence the sound as well as the diseased portions of our institutions and our laws. How it proceeded, let the many statutes directed to the application of practical remedies to practical evils bear witness. There were no speculative experiments, as might have been expected in the storm of a revolutionary change; but each feudal baron, and each honest burgher, in applying himself to a national privilege too long neglected, finished, in a few weeks, a code of laws, which could not be surpassed for sagacious adaptation to the times, by the matured experience of statesmen who had grown grey in legislation.

The validity of these statutes were denied by Mary, when she came (as Mr. Turnbull tells us) "to rule her own barbarians:" an act which formed the root of all her sorrows, by unloosening the confidence of her people, has found, of course, a defender in Mr. Tytler. The Parliament, though called in virtue of the treaty, she refused to recognize, or the treaty itself to ratify. "The Queen of Scotland," says Mr. Tytler, "refused to be bound by an agreement to which she was no party,"—(vol. vi., p. 173;) an assertion based on the alleged fact, which has no authority to countenance it, that Mary's commissioners, in agreeing to the treaty, had exceeded their powers. The consequence was, that during the whole of Mary's reign, the statutes establishing the Protestant religion never received the sanction of the Crown, and it was only in the regency of Murray, that they were put beyond legal cavil.

"The three estates," continues the historian, "had assembled of their own authority; [This is erroneous: they met in terms of a solemn treaty,] and by a series of acts, more sweeping than any that had ever passed in the preceding history of the country, had introduced innovations, which it was impossible could be regarded without alarm. [viz., establishing Protestantism.] They had overturned the established religion, and let loose against all who ventured to adhere to the belief of their fathers, the fury of religious persecution; they had entered into a league with another kingdom, and, as if conscious of the illegal nature of their proceedings, had attempted to pro-

fect themselves against the punishment of the laws by giving a pretended parliamentary sanction to the most violent of their measures." (Vol. vi., p. 191.)

All this vehement and ridiculous declamation has been resorted to for the purpose of justifying Mary in her refusal to sanction the parliamentary decrees. Never was there in Scottish history a convention of the states which spoke with such cordial feeling the wishes of the people; and never were charges more recklessly and unjustly advanced than those produced against it by Mr. Tytler. With regard to its legality, it would be in vain for us to add a word to the philosophical disquisition of Robertson. It had all the formalities of the greatest and most important parliamentary assemblies that ever met. The Queen, through her commissioners, consented, and only withheld her written concurrence when the object was gained of a cessation of hostilities. It was surely surrounded with far more of legal solemnity than that convention which offered the throne to the Prince of Orange, or that Parliament which, in later times, on the insanity of George the Third, conferred a restricted regency on his son. And with regard to "the fury of religious persecution," which they let loose on all adherents "to the belief of their fathers," the historian, as he too often does, resorted to his own imagination. It is absolutely scandalous, at this era of our history, to have accusations advanced which are in direct contradiction to the statements even of contemporary vilifiers of the Reformers. Lesly, the Bishop of Ross, resigns his tone of complaint and menace, to inform us that the Protestants, fresh from the sight of the martyrdom of their noblest spirits, never spilled one drop of blood, compelled few to become exiles, and fewer were imprisoned. This humanity, he tells us, ought not to be concealed. "*Humanitas non est reticenda, quod, eo tempore, paucos Catholicos de religionis re mulcarent exilio, pauciores carcere, morte nullos.*"

It would be in vain to hunt down every small sneer with which the history of the Protestants at this era is told. To exhibit every little perversion would be to weary readers already acquainted with the subject, and would fail to interest others, without entering into long details. There is, however, one fact which, on account of its tangibility, we may note. The Protestants prepared a Confession of Faith, which was laid before Parliament, and which the Catholic members required time to consider, as it

"branched into so many intricate, profound, and important subjects. To these sensible and moderate representations," says Mr. Tytler, "no attention appears to have been paid; the treatise was laid upon the table; the Bishops were called upon to oppugn it upon the instant, and having declined the contest, the consent of the Parliament was given almost by acclamation."—(Vol. vi., p. 184.)

There is here a misrepresentation in every line. Instead of being hurried through with all this indecent haste, the Confession was considered at different meetings, and at distant intervals. It was first placed on the table of Parliament, and all the Roman Catholics were "commanded, in God's name, to object, if they could say anything against that doctrine."—(Knox, *Historie*, p. 272.) What followed? Let Dr. M'Crie tell us:—

"The farther consideration of it was adjourned to a subsequent day, that none might pretend that an undue advantage had been taken of him, or that a matter of such importance had been concluded precipitately. On the 17th of August," (a month and a half after it was first produced,) "the Parliament resumed the subject, and, previous to the vote, the Confession was again read, article by article."—(M'Crie's *Knox*, 5th Ed., p. 203.)

We are anxious to ascertain upon what ground Mr. Tytler can here defend himself.

It is only natural to expect that, while the Protestants are exhibited as the reckless instruments of change and revolution, the Papists shine out as the conservators of peace, the friends of learning and education,—mild, intelligent, and moral. Of all unfortunate illustrations, the most ridiculous is that which has been chosen. To fix upon Hamilton, Archbishop of St. Andrews, the most unprincipled and profligate of mankind, for a subject of laudation, appears to be the most Quixotic attempt Mr. Tytler makes against unquestioned history. "He was a prelate," says Mr. Tytler, "whose character partook nothing of cruelty."—(Vol. vi., p. 86.) "He let loose," says Dr. Robertson, "all the rage of persecution against the reformed; sentenced to the flames an aged priest, who had been convicted of embracing the Protestant opinions, and summoned several others, suspected of the same crime, to appear before a synod of the clergy."—(Robertson, vol. i., p. 142.) Walter Mill, the aged priest referred to, was condemned to die by Hamilton's own servant, as no secular judge would perform the deed; and yet Mr. Tytler tells us that "the prelate was innocent of having instigated it." This pious and holy bishop, whom the historian wishes to rescue from the undeserved infamy of three centuries, was the only man who could be found to urge the scheme of *assassinating* Mary in Lochleven, with the view of bringing the throne nearer to his own family.—(Vol. vii., p. 141, Tytler.) We cannot understand the chivalrous fight the historian has made in his behalf. With the view of showing his anxiety for the spiritual welfare of the land, Mr. Tytler notices a letter from Hamilton to the Earl of Argyll, filled with reproaches against his heretical opinions, and expressions of sorrow at his lapse; but he tells us nothing of the answer, which refers to matters of too disagreeable a character

for Mr. Tytler's object. The aged earl refused to dismiss his heretical chaplain at the bishop's command, and told the holy priest such truths as these: "He preaches against idolatry;—I remit to your lordship's conscience if it be heresy or not. He preaches against adultery and fornication;—I refer that to your lordship's conscience. He preaches against hypocrisy;—I refer that to your lordship's conscience." And the letter concludes with an advice to Hamilton to go and do likewise—(Knox, p. 102.)

The thrilling interest of the latter days of "the beauteous Stuart," has completely thrown the story of her early life into the shade; and, in consequence, her defenders have urged her cause not on the sole rational ground on which it ought to rest,—the bad education of a profligate court,—but have resorted to the coarse expedient of accusing every hostile historian as a forger and a knave. To men not misled by the wild chace of a foolish theory—every moment catching the shadow and losing the substance—this style of writing has had its day. The world has become tired of the dull platitudes of declamatory history, which have run from the pen of hundreds, cursed with the scribbling itch of meagre production, with a glib expedition and easy jingle, hiding the truth without touching the intellect by vigorous speculation, or stimulating the fancy by graceful rhetoric.

The education of Mary in France was directed with perverse ingenuity to unfit her for the position to which her destiny called her. She was early instructed in principles of the fiercest intolerance, and the sacred name of religion was employed to varnish deeds at which humanity stands aghast. The intriguing high-priest glosing in the ears of Princes, and the vile ambitious clerical politician, were presented to her unsophisticated mind, as the perfect types of religious teachers. Heresy was gibbeted as the twin sister of treason; and her ambitious uncles ever inculcated it as the unchanging policy of their race, to yield submission to the mandates of the Popedom. At an early age the future Queen of a nation of royalist republicans, was obliged to commit to memory grave discourses, embodying the arbitrary maxims of a despotic government, and her religious and political education only required the moral training of the Court of Catherine de Medicis to complete an instruction destitute of one element of fitness for a Scottish Queen. Amid an eternal round of masquerades, tournaments, and balls, forming the staple business of existence, Mary learnt the morality she was afterwards to practice; and it is a reference to this portion of her history that softens the judgment, on the long line of indiscretions and crimes that marked her unhappy existence.

The ambition of her uncles, the Duke of Guise and the Cardinal of Lorrain, was the cause of many miseries, though the latter appears to have loved her with a warm affection, seldom exhibited

by cold-hearted ambitious men. His death affected Mary in her lonely imprisonment in England, more than any of the other calamities which overtook her. All the world had then forsaken her, and the last glimmering hope of rescue expired when the sad news arrived that his stormy life was done.

"God be praised," she says, in a letter to the Archbishop of Glasgow, "God be praised, if he sends me afflictions, he has thus far given me grace to support them. Though I cannot at the first moment command my feelings, or prevent the tears that will flow, yet my long adversity has taught me to hope for consolation for all my afflictions in a better life. Alas! I am a prisoner, and God has bereft me of one of those persons whom I most loved; what shall I say more? He has bereft me at one blow of my father and my uncle. I shall now follow whenever he pleases with less regret." At the close of her letter she adds this touch of nature:—"I beg you will write me a particular account of everything, and if he spoke of me before his death, for that would be a consolation."—(1 Strickland, 213.) Even in little things he was kind to her. "If," she says, "M. the Cardinal of Guise be gone to Lyons, I am sure he will send me a couple of pretty little dogs."—(Vol. i., p. 209.)

Such were the men who were the early guides of Mary Stuart—men who were kind to her, but knew nothing of the people she was called to govern.

The Scots are naturally a loyal people. Their attachment to the Stuart race, when human prudence had pronounced their fortunes ended, was testified in the two hopeless rebellions of '15 and '45. It was not the glory of renowned deeds, or gratitude to beneficent kings, that enlisted the people's affections for so poor a race. But the national pride was flattered by the circumstance that they were our native kings, and a generous sympathy buried their errors in their misfortunes. It was with this gallant loyalty that a Protestant people rent the air with shouts of welcome, when their Catholic Sovereign disembarked at Leith, and assuredly human speech was never to her a scoff or a malediction, till patience had become exhausted by her folly or her crimes. Every thing was forgotten in the desire to please, and Mary, during her four first years of prosperity, began to think it possible to live among "*les bêtes Ecossais*."

In narrating this portion of her history, Mr. Tytler has advanced his theory as to the cause of all her miseries. However honest, he tells us, might be the motives of the Reformers, their conduct was, in the last degree, impolitic and tyrannical. They stood in the Queen's path, in her business, and her amusements; embittered her existence by thwarting her personal feelings and her public schemes, and thus, irritation operating upon a haughty mind, self-confident and self-relying, sent her to an extreme in which honour, liberty, and life were lost.

In the naked majesty of metaphysical abstraction, the principle of unqualified submission to a sovereign, whose grace and loveliness were "framed in the prodigality of nature," might be urged with much eloquence by such philosophers as Mr. Buckingham and Mr. Tytler; but the students of the history of a limited monarchy, will be prepared to find no exception made with regard to the violators of its laws. The case insisted on by Mr. Tytler is certainly the best for the enforcement of his theory of submission. The Parliament of 1560 had pronounced the celebration of the mass to be a crime, punishable with heavy penalties, which the good sense of the Reformers never exacted. It was an enactment intolerant and unwise, and which can only be justified on the principle of self-defence, which so often puts to flight all general rules for the conduct of human life, and all the general maxims which ought to guide the liberal and politic legislation of an empire. Knox, terrified at the preparations made throughout the world for the extinction of the heresy of Protestantism, saw, in the Queen's attendance at the mass, a silent influence at work, for the creation of a party to enable the Queen to carry out the bloody scheme, afterwards embodied in the famous League of Bayonne. He never ceased, in consequence, to exclaim against the mass in Holyrood Chapel, as being a violation of the laws, and was met by the sarcastic Lethington with the sneer, that his ideas were only "devout imaginations," while Murray would gruffly speak of the necessity of patience. "The matter fell so hot," he tells us, between himself and Murray, that "familiarily after that time, they spake not together, more than a year and a half."—(Knox, p. 357.)

The question thus raised, as to the interference with the Queen's religion, is of vast importance in the science of government. It is one which Mr. Tytler decides differently from the judgment given by the practical wisdom of the world. We can find in the history of no limited monarchy, that the supreme magistrate was long allowed to profess a religion different from that of the majority of the people over whom he ruled. This is a hardship certainly; but it is one which must be endured with patience, as the counterpart of the privileges of royalty. The divine right of kings was indeed a doctrine incompatible with restrictions and conditions; it was a doctrine which the Stuart race believed, and which they found learned scholars to defend; but it is one totally incompatible with the principles of a limited monarchy, or with any government whatever, which has its foundation in right reason. One of the most important restrictions, is that relative to the sovereign's religion. On all other matters of human knowledge, his opinions may set at defiance common sense; but as soon as he diverges from the received belief, on matters of religion, he not only violates one of the great

conditions, silent or expressed, on which power was given him, but he creates a source of discord and insecurity, rendering his deposition necessary for the public peace. To avoid this rough medicine to a cankered commonwealth, the statesmen of the world have, in modern days, embodied their restrictions in the formality of oaths, wishing rather to be the assertors than remedially the avengers of their rights. They exact it not from the malicious love of tyrannizing, as Mr. Tytler tells us; not from the vanity of seeing their own principles decked out in the state dress of power; but their object is the safety of themselves and their country, the annihilation of sources of heart-burning and of anger;—a cool and deliberate principle, which acts irrespective of persons, which two centuries of uninterrupted prosperity has declared to be useful, and the denial of which produced scenes of calamity and downfall, which convulsed the empire, and, in the general ruin, swept away, with an accumulation of sufferings, families who could trace an ancestry through generations of noble and royal descent, but who were too conscientious to capitulate with a religion which they could not extirpate.

It is needless to argue in support of a principle, which at the present hour is the law of the British empire, and which calamitous necessity has created a fundamental principle of monarchical politics. Mr. Tytler, in truth, closed the volume of history when he wrote this portion of Mary's history. Holding the opinions which he does, it is only consistent, to represent the opposition, not very strenuous and not very decided—wasting itself away, rather in peevish complaint than in energetic action,—as factious and tyrannical. A partizan embroiled in the turmoil of the period, or one of the herd of sentimentalists, who have disgraced history by misrepresenting it, might be expected thus to argue; but an impartial historian, desirous of the approbation of the reflecting portion of his countrymen, ought to rise superior to the narrow prejudice, which denounces a true principle, because productive of individual hardship. And, seeing his own opinions denied in theory as they have been trampled upon in practice, there ought to be some concession to the almost universal prejudice, if not the just judgment of mankind.

But there is something still more reprehensible in the account of the Queen's proceedings in regard to religion. Mr. Tytler artfully represents her, in the position of a beautiful princess, kept in duress by a band of frightful ogres, with long beards and fierce language. He narrates, with his accustomed superfluity of detail, her solemn protestations of her desire to maintain intact the religion of the Protestants; he sinks entirely into oblivion her determination to tear it up root and branch, and her ener-

getic schemes to accomplish this. The League of Bayonne, which she signed, and which was unquestionably one of the most infamous conspiracies ever concocted, is here dismissed with a few small words of regret, that Mary's friendship for her relatives had made her indiscreet. Nothing is said as to her letter to the Council of Trent, wherein she promised her hearty concurrence in any scheme for the extirpation of the "damnable error" that covered Scotland. To reduce laws to silence, and, in the plenitude of legislative omnipotence, to annul Acts of Parliament, was nothing to one educated by the House of Guise. The Act of 1560, which abolished the old consistorial courts, Mary set at defiance, by restoring the consistorial jurisdiction of Hamilton, the Archbishop of St. Andrews. This fact, which was long denied, is now admitted, though Mr. Tytler dismisses it in ten words, and at the same time falls into a most extraordinary admission, as coming from a partizan of Mary;—

" all unawares
Fluttering his pinions vain, plumb down he drops
Ten thousand fathom deep."

In describing the events which followed the murder of Darnley, he states, that "a divorce between Bothwell and his Countess Lady Jane Gordon, was procured with indecent haste; and it was suspected that the recent restoration of his consistorial rights to the Archbishop of St. Andrews, had been made with this object," (vol. vii., p. 90.) This incidental notice, is all the mention of the circumstance in this history; and if the object thus assigned were true, it is clear, according to Mr. Tytler's own shewing, that the Queen was of the foreknowledge of her husband's murder, since the restoration of the Archbishop took place on 23d December 1566, and the King was murdered on 9th February 1566-7.—(Laing's History, vol. i., p. 23.)

These were not the only measures adopted to recall—in the language of Knox—"the Roman Antichrist, by just laws once banished from this realm." The Romish ceremonies in Holyrood chapel, which once were private, were thrown open to the public, and were attended by all on whom the Royal influence could be got to bear. Bedford is extremely lacrymose on her successful proselytizing, (Wright's Queen Elizabeth, vol. i., p. 204;) and Bishop Grindal goes into details as to the preparations made for seizing hold of the city churches, and stocking them with Popish images, (Stripe's Grindal, App. 20.) As all this, and much more to the same effect, has been entirely omitted or slurred over in this history, we shall cite the impartiality of a foreigner, in regard to a point of the last importance:—

"Without," says Raumer, "regarding the warnings of Melville

and other persons attached to her, she persisted in her course ; summoned a Parliament to condemn the fugitive lords, and sequestered their estates. She permitted Romish worship to be everywhere celebrated, restored the Archbishop of St. Andrews to all his rights, commissioned him to institute inquiries against the heretics, and deprived the Protestant clergy of almost all the powers which had been granted to them."—(Vol. i., p. 203.)

The tide of Mary's love had scarce risen, when it fell. She found an overgrown school-boy in the room of that being of ideal perfection, framed out when passion and imagination were young. Of his folly, his silliness, and his mean and low vices, ample details will be found in the works now under consideration. It requires no deep knowledge of human nature, to guess the full strength of that revulsion, which turned girlish fondness to intensest loathing, when the proud descendant of a line of kings, who had stooped to marry, found all her sacrifice in vain. It touched her woman's vanity to the quick, to find all her beauty powerless, and the nameless assiduities due to her, never thought of, when some childish rattle called her husband to an excitement suited to his tastes. Affection whose forfeiture is generated in contempt, never returns. A deep injury may be atoned for, but the feeling of contempt implies the uprooting of all the sympathies on which attachment rests.

Mary was not one to feed for ever on the memory of vanished hopes. The murder of the King, followed by her rapid marriage with Bothwell—her dethronement, imprisonment, escape, and ultimate defeat, are crowded into a space so brief, that it is amazing how they could have afforded scope for works so extensive. The whole series of events are fortunately rare in human history, though their perusal delights us with the double charm of reality and romance. Mr. Tytler's opinion evidently leans against the Queen, on the great question as to her husband's murder, though he hesitates to state it. We have now, perhaps, recovered all the evidence which the many changes of three centuries have left us ; and it seems hopeless to expect, that a more correct conclusion can be arrived at in some future age, when the besom of a more skilful industry shall have swept out from their obscure hiding places some more conclusive proof, to strike the balance of good and evil, with regard to the actors in that famous tragedy.

It is unnecessary to revive a subject so hacknied, though there are some portions of it we are obliged to notice in discharging our duty to Mr. Tytler. He has left the story in the same position as he found it, with the exception of a new fact as to the time when Mary visited Bothwell at the Hermitage, and a mysterious interlude performed by two Italians, who, after playing certain antics,

vanish in smoke. But there is one point on which our four authors are more or less agreed, namely, that Mary hated Bothwell as intensely as she did his victim. We must meet this, upon the evidence, with an unceremonious contradiction. That she loved him, and for him was content to sacrifice rank and honour, good name, self-respect, the regard of friends, and a nation's affection, is a fact as indisputably proved as that she married him. Of this there is evidence sufficient in the works we are reviewing, without calling in the assistance of the celebrated sonnets, of which controversy, by denying their integrity, has disputed their information. In the season of winter, Mary rode sixty miles in one day to visit Bothwell; but this, according to Mr. Tytler, was on the business of the state: and the consequence immediately was a burning fever; but Mr. Tytler tells us that this was owing to the unhappy bickerings with the King, at that time in the west of Scotland. The most strenuous defenders of Mary, we believe, give up this journey as an act of indiscretion at the best; to speak severely of it, the consequence of a warm affection; to say the worst of it, the evidence of a bad passion, which had grown beyond the restraints of decency and prudence.

Bothwell, the profligate adventurer, so honoured and caressed, took the place of the unhappy King, who was now driven from city to city, without respect or attendants. After Darnley's career was closed, and Bothwell had become the husband of his widow, we find, with the exception of one instance, an unvarying affection between them. When Mary was a prisoner, after the defeat at Carberry Hill, "she avoweth," according to Throckmorton, "that she will live and die with him, and saith, that if it were put to her choice, to relinquish her crown and kingdom or the Lord Bothwell, she would leave her kingdom and dignity to go as a simple damsel with him."—(2 Strick. 280.) And this strong expression of feeling she afterwards repeated in Lochleven, (Tytler, vol. vii., p. 134.) While such were her feelings towards Bothwell, those in regard to Darnley were of such a nature that Bedford tells us, that "it cannot for modesty, nor with the honour of a Queen, be reported what she said of him."

We pass over the indecent haste of the hurried burial; the want of all investigation as to the authors of the crime; the farce termed the trial of Bothwell; his collusive seizure of the Queen at Cramond, and carrying her to Dunbar; their marriage within five months of the murder; the rout at Carberry Hill, and the final overthrow of Langside. Let us follow her to another land, when she was formally arraigned for her husband's murder, and when those celebrated writings were produced upon which all the controversy rests. On this point, a decided advance is made when we find advocates of Mary so well acquainted with the

history as Mr. Tytler, conceding that part only of the writings were forged, and that the rest of them were genuine. Another step would have carried the historian to the conclusion, which he almost seems to hold but is afraid to state, when he reflects upon the strange and inexplicable conduct of Mary in reference to the proceedings before Elizabeth,—inexplicable on any theory except one inconsistent with her innocence. To speak of compromise when a charge of murder was advanced, instead of courting inquiry, which her innocence, if she were innocent, would have rendered so triumphant, carries along with it a moral conviction as irresistible as the most direct evidence could have induced. This is a conclusion consistent enough with the most kindly nature, and with unbounded benevolence of heart; for it is a fatal error to run the parallel between general conduct and the aberrations of passion. Hatred to Darnley sinking into despair of rescue—love of Bothwell amounting to frenzy—were feelings strong enough to shatter stronger principles than those of Mary Stuart, without joining her in the sisterhood of a Fulvia, an Octavia, or a Messalina.

It is a frequent enough episode in the dull uniformity of human life, that selfish interests rend asunder the duties of men, and the passions trample upon both. Mary, never having known the discipline of restraint, made her desires her politics and her morals. Educated in the polished vice and elegant profligacy of a great capital, her religion became pliant to every caprice. Complaint, in truth, was the largest tribute she paid to heaven, and the sincerest part of her devotions. The child of impulse, she could not subdue her feelings to her duties, nor was she able to avoid her virtues or her vices; and thus her melancholy story presents not the gradual wearing away of principle before temptation, but the instantaneous demolition before an avalanche of passion of the frail barriers of modesty and self-respect, implanted in the human heart as antidotes to its native tendency to corruption.

It is a sad and mournful picture to trace the fall of one who began life with such high promise, and to find the greeting, affectionate and respectful,—“Bless her bonnie face,”—soon turned to execration. To see a gentle being grow prematurely old in passions,—and the worst passions that excite us,—compels sorrow at the ruin of noble endowments, apart from the general calamities it engendered. The rash vehemence of her race led her into perilous situations from which she was unable to rescue herself, and from which rescue appeared to afford no relief from misery. Once launched upon the current of passion, she resigned all control over her future progress, and glided onwards with a stream which fast led her to destruction.

The question which so long agitated and perplexed historians, is, however, of nearly as little importance as the ridiculous controversies of the schools. Now, when posterity is called upon to estimate her character, there are sufficient undisputed facts in Mary's history, without insisting on a point, which dogmatism and ingenuity will never settle. "I am afraid," says David Hume to Dr. Robertson, "that you, as well as myself, have drawn Mary's character with too great softenings. She was undoubtedly a violent woman at all times." She made, in truth, a prodigal and wild waste of indiscretions. She did everything to irritate a people jealous of their liberties and their religion; and if she did not authorise the murder of her husband, she approved of it when done, protected the unquestioned authors of it from the just vengeance of the laws, and put the climax to her fate by marrying their chief. There are few among our sentimental writers who have had the boldness to justify these things; and some of them, like Keith, have had the candour to exclaim that there never "was a marriage so scandalous as this." It is well that, in the picture of suffering honour, generosity, and integrity, these writers confine themselves to common-places in regard to the fallibility of human nature, though their strange philosophy has sometimes rounded the edge of virtue so that vice may ride it, and improved adultery and murder into a higher order of infirmity, or a lower description of virtue. But when from sentiment and generality we descend to meaning, there seems insuperable obstacles to any distinction between the murderer and his protector. The laws that uphold society, while they often excite regret as to their want of delicacy in distinguishing between the vices, generally acknowledge the unfashioned virtues, and strike with sufficient force against the greater crimes. They have on this subject pronounced a sentence which recognizes, in the deed of Mary Stuart, no claim to our sympathies or our regards. They declare the accessory to be as guilty as the principal, and visit them with an impartial infamy.

There is nothing in the case of Mary Stuart that takes it beyond a rule, which is not so much of civil jurisprudence as of the reason, and according to the moral nature of man. Has it come to this, that the ruler of a Christian land, who had openly enacted the tragedy of the melancholy Dane—had protected her husband's murderer and married him—should be left unmarked by the reprobation of every heart that has beat with horror at the tale of fancy which genius has immortalized? Truly sentimentalism has reached its verge when it tells out its doleful lamentations on the tardy justice which removed from sovereignty one who had so resigned herself. Had the marriage with

Darnley been one of political necessity, where feelings were compromised for interests, and the exigencies of state policy had demanded the immolation of her affections on the altar of her greatness, there would have been room for the hacknied picture of novelists and romancers. But that one, who had sown the bitter fruit she was obliged to eat, should demand more than justice, is something which can only find support in the indiscriminate eulogy of party, the juvenilities of sentiment, or the absurdities of paradox.

Had Mary perished at Langside, when her banner dragged the dust never again to re-appear, she would not perhaps have excited so lasting a sympathy for her misfortunes. But her nineteen years of imprisonment, and her tragic death, met with the brave heroism of her race, have created for her defence a morality that neither Plato nor the Bible owns. In the groves of this academy, instead of a venerable sage to teach the words of wisdom, we have only a band of whining moralists, whose code changes according to the rank and beauty of the party, whose worth is to be tried. We admire the skill with which the murder and the marriage are overlooked, in order to enforce upon our notice the patient fortitude of a nineteen years' captivity. It was not indeed upon the throne that the best points of Mary's character appeared. It is in the solitude of her prisons that scope was given for the display of those kindly feelings of gratitude to those who, for her, had sacrificed country and kindred—affection to relatives and friends, and even to the very spaniels whom her kindness cherished, joined at intervals with outbursts of that resolute spirit which had saved her amid the early insurrections which she crushed, and which long years of agonizing sorrow could not extinguish. We read of sufferings firmly endured, and of protestations of innocence which never varied, mingled with times of mournful depression, when the heart, overcome with glimpses of lost happiness, rendered the retrospect bitter, and denied for the future even the luxury of hope. The ability with which, unsupported and alone, she met the appalling charges proclaimed against her, and the strength of mind with which she endured her sad reverse, leave us only with mingled feelings of admiration and astonishment. Human nature is indeed less heroic in action than in suffering. The intellectual faculties too, have their virtues as well as the moral, and graceful accomplishments are scarce less commendable than integrity. Thus, the thousands who believe in the whole catalogue of crimes of which she is accused, may, instead of satisfactions enforced, and injuries avenged, be ready to seek a palliative medium for their censure. Their admiration gradually slides into a warmer feeling. Their philosophy, while it becomes a detector of the naked poverty of

humanity, delights again to cover the miseries it has exposed, and not to press too hardly upon one who, if she greatly erred, was greatly tempted, and made her expiation in bitter, and nearly unexampled sorrows.

Passionate and headstrong to a degree which nothing could impede, her conduct presented the most extraordinary amount of errors, contradictions, open and unblushing inconsistencies, likings and hatreds, irregular sallies of virtue, with the violence of a sirocco while the fit lasted, and with all its erratic irregularity. The gentle zephyr scarcely ceased to blow when Boreas began. The same persons were one day covered with caresses, and the next repelled with insults, and threatened with forfeitures. Murray was at first flattered and ennobled, and then hunted as a criminal from his country; received into favour again, and then pursued with unrelenting virulence to the last. Darnley himself had scarce emerged from the caresses of the honeymoon, before he was chased from city to city, as if he had the plague. For Bothwell Mary had sacrificed her all, and yet, on the very marriage-day, she was crying for a dagger to rid herself of life; and three weeks afterwards, when the tide had turned, she was willing to follow him as a simple damsel throughout the world. With grave contempt for the opinion of her people, she loudly proclaimed the continual changes of her inconstant disposition;—enough, in her own day, to affix a levity to her name, that shook all the confidence which her vigorous intellect would have procured her—which often sublimed folly into madness, and which leaves the readers of her story with the painful conviction, that there were moments of delirium in her life. Her evanescent pleasures and her enduring agonies; her first weaknesses and her later struggles; her good resolutions and her reckless schemes, are all inscribed with a blind fatality of error, which ultimately led to the scaffold the scion of an hundred kings.

Next to Mary Stuart, the most prominent actor in that age of stirring adventure was unquestionably the Presbyterian Reformer. The history of Tytler in regard to him, if not so openly abusive as that of Hume, is still calculated to lead to the same conclusion as to his bigotry, intolerance, brutality, and fanaticism. Open and direct abuse gives place to a more artful style. Knox is first described with that faint praise, which insinuates that there is much to blame; and the appearance of extraordinary candour is displayed, by the admission of the quality of courageous energy, which it would be impossible to deny. The history then proceeds in its even tenor of quiet reproof; faithful quotations appear, of every angry expression of the controversial leader of a religious revolution; and the dead calumnies of other days are dragged from the quiet of their tombs to the resurrection of a second life.

We ever understood that Knox deserved well of his country ; that along with being a man of keen temper and uncompromising disposition, he laboured in support of honest principles, and for the creation of noble institutions. It is written in histories, though not in Mr. Tytler's, that he squandered himself for the people whom he roused from the lethargic sleep of ignorance, and that no feeling of interest or of friendship ever stifled his rebuke of personal immorality, or of oppression to the poor. The powerful nobility who robbed the Church as the price of their conversion, found in him the untiring denouncer of their ruthless spoliation ; and religion, since the elder ages when inspiration gave it vigour, never found a more zealous adherent, or one who more consistently endeavoured to illustrate it by example. All this, however, is blotted out of history. We are presented with nothing but a degrading caricature of a brutal, unfeeling savage, who, like the ghoul in the Eastern tale, delighted in execrations of loveliness and beauty, and whose iron heart never warmed beneath the sunshine of amiability. All the fond colours of reverence and respect, which have ever been associated with the Reformer's name, are thus dissipated like a pleasing vision, which had soothed the world into the tranquil slumber of a foolish ignorance.

That we may not be thought to misrepresent Mr. Tytler, we shall give his opinion in his own language ; but as we cannot afford room for a volume, we shall quote every word of his own abridgment of his history, where the name of Knox occurs. Many of our readers may anticipate the following as the epitome of an impartial historian :—

“ Knox persecuted for his heretico-Protestant opinions ;—refuses a bishopric—lives an exile on account of persecutions in his own country—returns to it, and labours with untiring perseverance for many years to establish Protestantism—rebukes the great for immorality, profaneness, and rapacity—establishes schools, and demands money for their support—appeals to the Parliament and the nobility for a maintenance to the Church—preaches during a long life a true religion—never received a bribe, and left his family so poor that they had scarce sufficient to bury him ; and dies with a lamentation universal in his own country, and its echo heard in far distant lands.”

This is what might be anticipated ; it is not, however, what we find. Here is Mr. Tytler's :—

“ Policy and intrigues of Knox—Mary's interview with Knox—his injudicious violence—discontent of Knox and the ministers—proposal of a meeting between Mary and Elizabeth—opposed by Knox—violence of Knox—Randolph censures him—Knox's interview with Mary—his criticism on the Court dancing—violence of Knox—policy of his party—Knox's pulpit address to the Protestant nobles—he attacks the Queen's marriage—his violent interview with Mary—he apostrophizes

the Court ladies—Lethington blames Knox's violence—observations on the conduct of Knox—Knox's return to Edinburgh—his vigorous [why not *violent* this time] exertions—Knox's refusal to pray for the Queen—illness and death of Knox."

Such is a transcript of Mr. Tytler's own epitome of the doings of the Scottish Reformer, in which there is only the one single idea of a savage perpetrating violence and knocks. It is improper, however, to leave Mr. Tytler with the advantage of charging us with dealing in generalities. It may tend somewhat to amusement, if not to instruction, if we shortly examine three distinct charges he has advanced, when, forgetting his Fabian policy on the unapproachable heights of inuendo and sneering, he accuses Knox of hypocrisy and cowardice, violent folly and murder.

Our readers will remember that Knox was a minister in England in the reign of Edward the Sixth, and arrived in Scotland at the beginning of the end of Roman Catholic domination. With his accustomed zeal, he began a crusade against the prevailing idolatry, and soon found at his back the infuriated yells of a thousand priests. Without any support from the nobility—who made the discovery at a later period that their interests and those of the Reformers ran in unison—he was left almost alone to face the storm. He had only two courses open,—either to instigate the populace to insurrection, or to retire into the obscurity from whence he came. At the critical moment he was elected minister of a Protestant congregation at Geneva, which he accepted, as a prudent retreat from the difficulties which surrounded him. He had as a precedent the wise prudence of the German reformer, whose retreat to the mountain castle of Wartburg, saved from a useless martyrdom a life on which hung momentous interests. Mr. Tytler, however, could not so regard the proceeding of the Reformer; and the following is the style in which the charge of hypocrisy and cowardice is sneeringly told:

"Possibly, by retiring, he saved his life; but, judging with all charity, it must be admitted that whilst his writings, at this period, had all the impassioned zeal, his conduct betrayed some want of the ardent courage of a martyr."—(Vol. vi., p. 80.)

There is not perhaps in Knox's history, a passage so calculated to exhibit the genuine unflinching character of the man, as his interviews with his unhappy Queen. Hume, without quoting the only record of them we possess, gives the grossest caricature, if it cannot be more strongly described as a deliberate violation of the truth. Far from being moved with beauty dissolved in tears, Knox is described as gloating in the wanton brutality of insolent reproof. Mr. Tytler is more specific in the narrative, less direct in the charge advanced, equally anxious to create the same impression, guilty of as much addition and as much sub-

traction from the record, as was necessary to his purpose, and equally indebted to imagination for point to his satire.

Mr. Tytler's account of the first interview might have been passed over unnoticed, had it appeared in the Monastery or the Abbot. In the sober pages of veritable history, it is unpardonable for the clumsy mode in which the burlesque is done.

"She (Mary) blamed him," says Mr. Tytler, "for the violence of his book against female government, and with a clearness and vigour of argument for which he was probably not prepared, pointed out its evil consequences in exciting subjects against their rulers."—(Vol. vi, p. 239.)

It would not have served the purpose of Mr. Tytler to have added, as Knox tells us, that "the Queen first accused him, that he had raised a part of her subjects against her mother and herself; that he was the cause of great sedition and great slaughter in England; and that it was said to her, that all that he did was by necromancy."—(Knox, *Historie*, p. 310.) Mr. Tytler, however, mentions that "she then advised him, to treat with greater charity those who differed from him in opinion," which advice is a pure invention of the historian's, drawn from his lively imagination. After some conversation as to the principles maintained in Knox's book, Mary mooted the dangerous subject of the right of the governed to resist the governors; and she immediately received from the Reformer one of the clearest expositions ever given, of the respective rights and duties of the subject and the ruler. "Think you," said she, "that subjects having power may resist their princes?"—a question which Mr. Tytler burlesques after this fashion. "What, cried the Queen, *starting and speaking with great energy*, do you maintain that subjects," &c. Where is Mr. Tytler's authority for saying that Mary, instead of "starting," &c., was not quietly engaged with her embroidery? The answer of Knox was the manly declaration of an unpalatable truth, little understood in his own day, but which, we will show Mr. Tytler, is expressed in nearly the same language in the pages of Paley and De Lolme. The historian, however, will find in it nothing but sedition; and a few additional touches to heighten the rudeness are thrown in. "It is even so, Madame," (Mr. Tytler narrates), "It is even so, Madame, continued the stern champion of resistance, *fixing his eyes upon the young Queen, and raising his voice to a tone which almost amounted to a menace.*" All this is purely imaginative. So far as history tells us, we are left in utter darkness as to whether Knox spoke in a low whisper or with a loud tone and furious gestures—whether his eyes were on the floor or on the ceiling, or fixed on the Queen or on Murray, or star-

ing straight forward, or winking askance, or half shut. Mr. Tytler also informs us of Mary's feelings as precisely as if she had left a journal of each varying emotion for his service. "At these words Mary stood for some time silent and amazed; she was terrified by the violence with which they were uttered." [A fancy of Mr. Tytler's own, and not a syllable about it in history.] "She thought of her own youth and weakness [*sic*]; of the fierce zealots by whom she was surrounded [*sic*]; her mind pictured to itself, in gloomy anticipation, the struggles which awaited her [*sic*], and she burst into tears." It appears from a letter of Thomas Randolph that the Queen, at the conclusion of the conference, began to weep; but whether this was caused by anger, as Randolph thinks, or by fear, as Mr. Tytler dogmatically tells us, is nothing to the question as to the propriety of the conduct of the Reformer. His opinion was asked on an elementary principle of constitutional government, and not being able to suit his answer "to the appetite of princes," it produced the result, which an unexpected and unpalatable truth would naturally operate on the mind of a passionate and headstrong woman.

This was not the only interview of Knox with Mary. After she had resolved on that unhappy marriage with Darnley, which embittered her existence, she could find no bounds to her anger against Knox for his public opposition. He was summoned before the Privy Council, and after receiving her upbraidings, she burst into tears. "What," she asked him, "have you to do with my marriage, or what are you within the commonwealth?" "A subject," said Knox proudly, "born, Madame, within the same; and though I be neither earl, lord, nor baron, yet hath God made me a profitable and useful member." Mr. Tytler, as usual, makes the plain honesty of the Reformer amount to insolence. When he is anxious to show the Queen that it is no mean sneaking sedition that urges him to argue against the marriage, he told Mary that, "to yourself I say what I spake in public," an expression which Mr. Tytler alters to give it point and virulence—"What I have said in public I here repeat to *your own face*." Knox finally was dismissed, and Mary took "no farther notice of his officious and uncalled-for interference with her marriage." Now, here we say again, is there everything left out that could display the kindly feelings of the warm-hearted Reformer. "Madame," said Knox, "in God's presence I speak, I never delighted in the weeping of any of God's creatures, yea, I can scarcely well abide the tears of mine own boys when my own hands correct them, much less can I rejoice in your Majesty's weeping; but seeing I have offered unto you no just occasion to be offended, but have spoken the truth, as my vocation craves of me, I must sustain

your Majesty's tears, rather than I dare hurt my conscience, or betray the commonwealth by silence."—(Knox, p. 360.) Mr. Tytler's limited space did not permit him to cite this passage.

But there is no portion of Mr. Tytler's History of the doings of the Reformer that excited a greater burst of astonishment than his assertion that "the great ecclesiastical leader Knox was privy" to the murder of David Rizzio. This assertion he takes pride to himself in mentioning, "is now stated for the first time."—(Vol. vii., p. 21, *note*.) It is insisted upon in the text, and is made the subject of an elaborate dissertation in the Appendix. Mr. Tytler was anticipated by such party writers as Goodall and Chalmers, though he does not seem to be aware of it; but the mode in which he proceeds to the attack is one more skilfully formed, and far more calculated to impose upon his readers. He professes himself "unable to escape" the conclusion that Knox was guilty, and, though with lacerated feelings, he is compelled to seal his doom. He does his best, however, to weep tears of anodyne into the wound. So candid a historian, so liberal a writer, so unwilling a witness, necessarily created an impression; and from the Quarterly Review to Mr. Lyon at St. Andrews, has it, in various shapes, been insisted on, until the echo disturbed the philosophic quiescence of German dreamers, who have repeated the story in their sober *Deutsch*, in one of the late numbers of the *Allgemeine Zeitung*.

Mr. Tytler represents the murder as a long preconcerted scheme, sanctioned by the leaders of all the factions but the Queen's. It is unnecessary to this discussion, to ascertain whether the act was a sudden ebullition of passion, or a matured conspiracy; but it is of importance to examine, as to the mode in which it was proposed to remove Rizzio from the fatigues of office. This point Mr. Tytler altogether evades; and his theory proceeds upon the erroneous assumption, that the scheme, as it was executed, was what was originally devised; an assertion made against the most explicit declarations of contemporary histories, that the intention was to bring Rizzio to public trial, and to condemn him with all the formalities of law. This is expressly stated in Hume's History of the House of Douglas and Angus—a work composed from the best and most authentic sources, (p. 290, fol. ed.); in Melville's Memoirs, (Keith, App. p. 121); in the "Relation" of Lord Ruthven, the prime conspirator, (p. 14); and by Douglas of Lochleven, one of the most active of the band. It was their intention, says Douglas, to have "punished him by order of justice, yet God disposed otherways, by such extraordinary means, which, truly my own heart abhorred, when I saw him; for I never consented that he should

have been used beside justice, neither was it in any nobleman his mind.”—(M'Crie's *Knox*, 5th ed., p. 293, *note*.)

It would not have been consistent with Mr. Tytler's theory, unless a barbarous murder had been intended from the first, because the accession to a party, whose object was to bring a supposed criminal to justice, would only be an act of highest commendation. It was necessary, therefore, to keep these authorities untold; and then the argument proceeds to establish Knox's connexion with the authors of a murder, perpetrated with preconcerted aggravations of horror.

We will assume with Mr. Tytler, that a murder was intended from the first—and shortly examine the case he thinks he has established. It appears, that, when groping amid the mouldering records of the State Paper Office, he discovered a letter of Thomas Randolph's, Elizabeth's Ambassador at the Scottish Court, containing an account of the murder, to which, in another hand, there was pinned a list of names, of those who were “at the death of Davy, and privy thereunto.” In this list, there occur the names of “John Knox and John Craig, preachers;” and this is the evidence on which the accusation rests.

Mr. Tytler first favours us with a letter from the Earl of Bedford, the Governor of Berwick, to Cecil, the Minister of Elizabeth, in which he, among other information as to the murder, states, that as “Mr. Randolph writeth also more at large of the names of such as now be gone abroad, I shall not trouble you therewith,” (vol. vii., p. 354.) Randolph, at this period, was resident at Berwick, and not in Edinburgh; and the letter referred to by Bedford, accordingly follows. It is dated the 21st March 1565-6; and in the body of this letter, Randolph gives the list of names in the following terms:—

“The Lords of the last attemptate, which were these—Morton, Ruthven, Lindsay, and Ledington. Besides these, that were the principal takers in hand of this matter, there are also these: the Laird of Ormiston, Hawton, his son-in-law, Cawder, his nephew, Brunsdon, Whyttyngham, Andrew Car of Fawlside, Justice-Clerk's brother, George Douglas, and some other; of the town of Edinburgh divers.”—(Vol. vii., p. 355.)

This is the list of Randolph, and in it Knox's name does not appear; but Mr. Tytler found a piece of paper, pinned to the letter, with some names, written in some unknown hand, which he says was the list Randolph was to send. Now, here, we humbly confess ourselves unable to follow Mr. Tytler. We have in Randolph's letter—in the body of it, and in his own handwriting—a precise definite list, which would be without any meaning at all, if the loose slip of paper was also to be

held as *the* list. This separate paper is not mentioned, moreover, as having been sent along with the letter; it is not written by Bedford or Randolph, or by any Secretary of Randolph's, but, according to Mr. Tytler, it must have been by some clerk of Bedford's, whom Randolph must have hired for the occasion. There is not the slightest evidence that it was seen by either of the ministers. The whole bond of connexion between it and their letter is the pin, just as the sole connexion between one part of Mr. Tytler's argument and the rest is the binding. That it was written by Bedford's clerk, we have nothing but Mr. Tytler's guess as proof; that it was a *jeu d'esprit* of some of the clerks in the London office, we offer as another guess. It is an anonymous, unauthenticated, nameless, scrap of paper, gathered from a mass of similar rubbish, to be rendered by Mr. Tytler powerful enough to annihilate the concurring testimony of all contemporary history!

From all this, however, Mr. Tytler maintains, that "the inference is inevitable." John Knox, in "an authentic list," is described as privy to the murder. Having thus doggedly pronounced his decree, Mr. Tytler declines an examination of the list, with the view of ascertaining if it be consistent with other acknowledged facts, or even with itself. It contains, however, several blunders, in the only two lines of narrative with which it favours us. It professes to be "a list of names, of such as were consenting to the death of David," which is totally contrary to the character of the list which Bedford said Randolph was to send, for it was only to contain "the names of such as *be gone abroad*;" a description which might apply to Knox, as he left Edinburgh on the Queen's return from Dunbar. There are only sixteen names given; but in the appendix to Keith, there is a list of those charged by the Privy Council as having been accessory to the crime, amounting in number to seventy-one; and in Pitcairn's Criminal Trials, there will be found thirty more. This is the first error, though it is not the greatest. It concludes with informing us that "all these were *at the death of Davy*, and privy thereunto, and are now in displeasure with the Queen, *and their houses taken and spoiled*." Here there are two gross mistakes. We never before heard it whispered, that either John Knox or John Craig was "*at the death*." Crawford and Blackwood, though they covered this part of history with the most impudent falsehoods, never crowned them by one like this; and Mr. Tytler's caution came to his aid. He will not believe the plain statement of his own authority, and he stops short of the charge, that Knox gave one of the fifty-three wounds. The paper is, however, too valuable to be rejected as unworthy of credit; it merely contains an error, and must be understood to

mean, "that all these were at the death of Davy, or privy thereto. After the crack has thus been soldered, another yawns, when we are informed, that the houses of all the persons named, were "*taken and spoiled*." This is unquestionably untrue as regards Craig, who remained in Edinburgh all the time labouring in his vocation; and we cannot in any authority, printed or unprinted, find the slightest warrant for saying, that such a fate overtook the establishment of Knox.

Thus, therefore, in whatever way we regard this scrap of paper, we find it like Falstaff's regiment, "ten times more dishonourable ragged than an old faced ancient." It leaks at every corner. It would have been held up to scorn and ridicule, had it been urged to support any of the charges against Mary; but with regard to Knox, where slight wounds are found, they are diligently aggravated, or scratched till they are made.

Mr. Tytler expends great industry in establishing that Randolph and Bedford were both in the full knowledge of all the facts relative to the conspiracy. Here also he entirely fails. With singular inconsistency, while he maintains the truth of the list, on the ground that "these two persons, the Earl of Bedford and Randolph, were intimately acquainted with the whole details of the conspiracy,"—(vol. vii. p. 357) he, in the next page, rejects this ground of credibility, and puts it on the information communicated to them after the event, "while it was yet new, and after the arrival of Lord Ruthven" at Berwick, from whom they received the whole details.—(Vol. vii., p. 360.) Again, in the following page, he makes another wheel, and after adopting his own list, because it was written "after the arrival of Lord Ruthven," he rejects a third list, to which we shall immediately refer (which omits the name of Knox,) because "the chief authorities of both account and list were Morton and Ruthven."—(Vol. vii., p. 361.) That these were not the chief authorities shall be immediately shown; but in the meantime, we rather think Mr. Tytler is more at home in describing death-bed scenes than in chopping logic.

It appears from all the evidence we possess, to be perfectly manifest, that neither Randolph nor Bedford knew anything of the details of the conspiracy, except what they obtained from the flying reports of the refugees who were daily flocking to Berwick. This can be clearly established without relying upon any admissions we might draw from Mr. Tytler's language. Besides the list contained in the body of Randolph's letter of 21st March, and the scrap of paper which Mr. Tytler found pinned to that letter, there exists a third list not written by a clerk, not unsubscribed, not unauthenticated; but in the handwriting of Randolph himself, and authenticated by the subscriptions of him and Bedford; and in this list also the name of Knox does not occur. This

list was sent on the 27th of March, with a minute account of the conspiracy, to the Council of England, and after every means had been adopted for arriving at the truth.

We have this important document printed elsewhere than in Mr. Tytler's history.* From it, it appears that both Randolph and Bedford were in the dark in regard to the whole matter, and resorted to every expedient to collect information. They state, that "hearing of so many matters as we do, and *finding such variety in the reports*, we have much ado to discern the verity, which maketh us the slower and loather to put anything in writing." [This uncertainty as to facts, be it observed, existed no less than six days, after Mr. Tytler's famous "authentic list" is said to have been sent off by Bedford's clerk to London.] The writers then state, that "we would not that your honours, and and by you the Queen's Majesty, our Sovereign, should be advertised but of the very truth, as near as we can possible." How did they proceed? "To this end, we thought good to send up Captain Carewe, who was in Edinburgh at the time of the last attempt, who spoke there with diverse, and after that with the Queen's self and her husband."

Thus, therefore, on the 27th of March, eighteen days after the murder, when the usual exaggerations and falsehoods that attend the first report of a startling event had died away, and when the English ministers had derived their information from the sure source of a special envoy, they sat down to write a deliberate account "of the very truth," "willing to our utmost part to inform you the truth." We beg attention to the data on which their statement is founded, on account of a perversion of fact by Mr. Tytler. They distinctly state, that their information is "conform to that which we have learned by others, and known by his (Captain Carewe's) report; we find the same *confirmed* by the parties selves that were there present, and assisters unto those that were executors of the deed."—(Ellis' Letters, vol. ii., p. 208.) In defiance of this explicit declaration, that "the chief authorities" were authentic statements made by the special commissioner and others, "*confirmed*" merely by Morton and Ruthven, we have Mr. Tytler, for a purpose of his own, risking the extraordinary assertion, (we will not characterize it more severely,) that Morton and Ruthven were the "chief authorities." The object of this is, to take away from the list the character of being impartial, by rendering it entirely the work of Morton and Ruthven, who, Mr. Tytler again most gratuitously, and without a shadow of evidence, tells us, wished, with Roman generosity, to screen Knox by sacrificing themselves.

* ELLIS' Letters, vol. ii., p. 207.

In this list of 27th March, we have "the names of such as were doers, and of counsel in this last attempt ;" and neither the name of Knox nor of Craig appears. Mr. Tytler accordingly very naturally cross-examines himself in the following style :—"Why do you reject the evidence of this second list, and why are we not to believe this solemn declaration absolving the ministers of Scotland, and of course Knox with them, from all participation in the murder?"—(Vol. vii., p. 360.) His answer to this sensible question, and the reply of his opponent, reminds one of the remark of Bishop Horne, that "by the writers of dialogues matters are often contrived, as in the combats of the Emperor Commodus, in his gladiatorial capacity, where the antagonist of his imperial majesty was allowed only a *leaden* weapon." He first asserts that Randolph and Bedford, in direct contradiction to their own averment oftentimes repeated in their letter, made up the list under the dictation of Morton and Ruthven, and that these two worthies had some inexplicable interest to conceal Knox's concern in the transaction. That they had any such interest, farther than the interest of truth, we again affirm to be destitute of proof, and has been invented solely to meet the exigencies of Mr. Tytler's argument. Again, Mr. Tytler not feeling secure on this point, makes another gratuitous assertion, when he says, that Randolph would be more precise on delicate matters in his private letter to Cecil of the 21st March, sending the scrap of paper, (assuming that he sent it, of which there is no evidence,) than he and Bedford would be to the Council in their letter of the 27th. That they felt any such delicacy is also contradicted by the very letter in question ; for, in mentioning the insinuations against Mary's honour, they write in the margin thus:—

"It is our parts to pass this over in silence, than to make any such rehearsal of things committed unto us in secret ; but we know to whom we write."—(Ellis, vol. ii., p. 229, *note*.)

But secondly, Mr. Tytler having thus argued that the list of 27th March was concocted at *Berwick* by Randolph, Bedford, Morton, and Ruthven, absolutely forgets what he had written, flounders into a new contradiction, and transfers the *locus delicti* and the culprits to London, where he makes Cecil, "the secretary of Elizabeth, modify and recast the story, after the failure of the conspiracy, and with the approbation and by the directions of Elizabeth."—(Vol. vii., p. 360.) One of these arguments must be false. It is clear that the very same act could not be done at *Berwick* and at London ; and that, too, by different people. On the authority of the Italian manuscript which Mr. Tytler cites, he may maintain à l'outrance, if it please him, that Cecil concocted the most enormous falsehoods

on the subject; but it is absolutely amazing how he imagines that, in consequence of this, Cecil had prepared the list of 27th March, when that very list itself now lies in the British Museum, patent to all the world, and, as he himself states, "in the handwriting of Randolph." !!!

So much for this third list. We now come to a *fourth*, as contained in another letter by Randolph. He here informs us, that "there are privy in Scotland these; Argyle, Morton, Boyd, Ruthven, and Liddington. In England these; Moray, Rothés, Grange, myself."—(Tytler, vol. vii., p. 25.) The name of Knox does not here occur. Nor does it in the *fifth* list, preserved in the appendix to Keith.

But this is not all. Morton and Ruthven wrote from Berwick a letter of their own to Cecil, in which they say that—

"It is come to our knowledge that some Papists have bruited, that these our proceedings have been at the instigation of the ministers of Scotland. We assure your Lordship, upon our honour, that there were none of them art nor part of that deed, nor were participate thereof."—(Tytler, vii., p. 360.)

Mr. Tytler again puts himself through the catechism. "Why not believe Morton [where is Ruthven?] when he states upon his word of honour that none of the ministers of Scotland were art and part of that deed?" He answers, that Morton did not know the meaning of *art and part*, seeing that on his own trial, he denied that he was art and part of the King's murder, though he admitted foreknowledge of it. But if this be the case, what does the other statement, that none of the ministers were *participate* in the murder mean; and in order to render this absurd hypercritical argument effectual, be it observed, that it is necessary to leave out of view that the letter is not Morton's only, but the joint production of him and Ruthven, and that the latter must have been equally obtuse in matters of philology.

There are still, however, some arguments remaining which we ask indulgence for examining also, as the matter involves so much the credit of an illustrious name.

"Another corroboration," says Mr. Tytler, "of his accession to this conspiracy was his precipitate flight from Edinburgh, with the rest of the conspirators, upon the threatened advance of the Queen to the city. Knox fled precipitately, and in extreme agony of spirit, to Kyle; and as we have already seen, did not venture to return till the noblemen rose against the Queen after the death of Darnley. If he was not implicated, why did he take guilt to himself by flight?"—Vol. vii., p. 359.

There is an extreme and ludicrous rapidity in a conclusion, which is neither morally just nor consistent with the facts. Flight by Knox before the Queen, marching on Edinburgh at the head of troops, was only a common measure of prudence in

his position. We have already seen that he frequently came into collision with Mary, and that her exasperation had reached such a point that she declared before her council—"I vow to God, I shall be once revenged."—(Knox, p. 359.) At this very time, too, he was a proscribed and marked man; and the very first person to be seized during the license of military misrule. In that old contemporary diary, titled "*A Diurnal of Occurrents*," which Mr. Tytler estimates so highly, we are informed that,

"upon the 19th day of August, the King (Darnley) came to St. Giles Kirk, and Johnne Knoxe preacht; quhairat he was crabbit, and *causit discharge* the said Johnne of his preitching."

Knox being thus prevented from discharging duty, it appears that he applied to the General Assembly, which met on 25th December, "for licence to passe to England," because "the exercise of his ministrie in Edinburgh was suspended,"—(2 Calderwood, p. 340;) and to this request, the Assembly acceded, on condition that he returned before the following June; now, seeing that Knox was in Edinburgh, on the 9th of March, when Rizzio was murdered, two months after the Assembly had sat, it is doubtful whether he had gone to the south. At all events, this is clear, that Knox was idle in Edinburgh, and labouring under the marked displeasure of the Court, and therefore, of all others, the first person that would have been summarily dealt with, on the occasion of an irruption of undisciplined troops into the city. On all these facts, Mr. Tytler has, however, kept a guarded and discreet silence.

He has also been mute as to the mode in which the Queen's forces fulfilled the worst anticipations of the refugees. The *Diurnal of Occurrents* informs us, that they recklessly entered the houses of the citizens, spoiled them of their goods, and without a shadow of suspicion, hurried them to prison. Randolph and Bedford tell Cecil that "diverse of the towne folk, honest men, were committed to prison, and diverse escaped,"—(2 Ellis, 233;) and "the extremitie is such, as under the Frenchmen, their lives were never so sore."—(*Ibid.*) This is farther confirmed by David Buchanan, who wrote the fifth book of Knox's history. "In the meantime, the men of war committed great outrages, in breaking up doors, thrusting themselves into every house."—(Knox, *Historie*, p. 432.) Many of the poor burghers fled from the city in terror. Two of them thus narrate their story:—

"They were in their own houses at supper, ignorant of the thing attempted, until the common bell rang, at which time we passed in company with the Provost, as many more did to the abbey, and that same night returned again and passed to our beds, within our own houses. This is the plain and simple truth of our parts." Although

this was all the connexion which this cutler and cordiner had with the matter, they state that they "*for fear absented themselves*, and so was put to the horn,"—a proceeding never attempted against Knox.—2 Pitcairn's Crim. Trials, p. 483.

So much as to Knox taking guilt to himself by flight. We come now to Mr. Tytler's argument, drawn from the opinions Knox is said to have expressed when the deed was done; for Mr. Tytler will not rely upon his "authentic list" as being absolutely conclusive. He quotes a passage from the fifth book of Knox's History, where the death of Rizzio is thus spoken of:—

"After this manner above specified, to wit, by the death of David Rizzio, the noblemen were relieved of their trouble, and restored to their places and rowmes, and likewise the church reformed, and all that professed the evangill within this realm, after fasting and prayer were delivered."

Now it is matter of notorious fact, that the fifth book of the volume, which goes under the name of Knox's History of the Reformation, was not written by him; and if this be the case, why should the historian drag in a passage, written by another hand, full sixty years after the grass was growing green upon his grave? Why should Knox be made responsible for the reflections of David Buchanan, with which that worthy gentleman enlightened the world in the following age? Knox himself expressly states, in incidentally referring to the death of Rizzio, and declining to tell the story, that "he refers it to such as God shall raise up to the same." As the force of all this could not be disputed, Mr. Tytler endeavours to implicate the Reformer, by insinuating that the statement might be found "in his notes and collections," for which however, we have only the worn-out authority of the historian's imagination, which can never take a flight except in one direction.

But the reflection itself contains nothing, that any Christian can or will deny; and though our business here is not with David Buchanan, we cannot allow Mr. Tytler to run away with the idea, that he is engaged in a holy work in denouncing him. We are informed that a man was slain, and Buchanan terms the authors of the deed "murderers,"—(p. 431.) He then states that the consequences of this murder were beneficial to his country, inasmuch as it saved the Church from great and impending calamity. He does not, however, laud the murder, though he returns thanks to heaven for the deliverance from tyranny which it produced. This distinction is clearly brought out by the mode in which Dr. M'Crie relates the feelings of the Reformer. In his first edition he says, that "there is no reason to think that he was privy to the conspiracy that proved fatal to Rizzio; but it is probable that he had expressed his satisfaction at an

event, which contributed to the safety of religion, and of the commonwealth, if not also his approbation of the *conduct* of the conspirators." But in his subsequent editions, observing that his language did not convey his meaning, he altered it to the effect that Knox expressed "his approbation of the *object* of the conspiracy,"—that is, to secure the reformed religion. Mr. Tytler, however, with unworthy disingenuity, quoted the passage in the first, instead of the fifth edition, as it suited his argument better. We could cover pages with farther evidence on this point; but let the following reflection of Robertson's, on the death of Beaton, suffice, as it is the same idea which, in the person of David Buchanan, has been so condemned:—

"Thus," says Dr. Robertson, "did these men *deliver their country*, though by a most *unjustifiable* action, from an ambitious man, whose pride was as insupportable to the nobles, as his cruelty and cunning were the great checks to the Reformation."—(Vol. i., p. 96.)

Knox's opinions on the subject of tyrannicide, are also brought in as an additional argument in favour of the theory of probability. These were in some respects peculiar, but of the great leading principle, Mr. Tytler will find that Paley's philosophy is only an expansion. Knox had other speculative opinions, like all speculative men, which he would hesitate to put in practice. He maintained, for example, that no woman could be a sovereign; but he did not refuse to recognize Queen Mary and Queen Elizabeth. We do not find, though Mr. Tytler asserts it, that Knox regarded "Senzeour Davy," in the light of a tyrant, to whom extreme measures should be applied; nor can we recognize in a speculative opinion of Knox, any more than of Paley, a proof of murder.

On the return of the Queen from Dunbar, the Privy Council was immediately convened, in order to bring down upon the murderers the punishment of the laws. Their directions on this head were of the most sweeping description;—"The Lords think expedient, that all that were of the device, council, or actually at the committing of the slaughter, shall be prosecuted by order of justice."—(Keith, App. p. 131.) Accordingly, seventy-one persons were put to "the horn," which, we understand, involved the pains and infamy of rebellion. And, in Pitcairn's Criminal Trials, we find that during the succeeding months of April, May, June, and July, this indiscriminate blistering of the lieges was kept up.—(Pitcairn, vol. ii., p. 283, *seq.*) High and low, rich and poor, were denounced; cordiners and cutlers in the Canongate; residents in Musselburgh and Dalkeith, were all involved in the indiscriminate forfeitures. Suspicion in nearly all cases was the ground of charge; and hence the simple, obvious,

but important question, why was Knox not denounced, seeing that "he took guilt to himself by flight?"—seeing that he was at the moment suffering a punishment imposed upon him by the King, who, in disclosing the names of all the other conspirators, would not surely overlook the man who had on other points displeased him? Was it not because no such interpretation was put upon his conduct by those who had every wish to put it, and because the breath of slander had not, in his own day, dimmed the lustre of his name?

The last argument we now approach—and it fortunately is one which may be disposed of in a sentence. There was a religious fast held in Edinburgh, during the week on which the murder was perpetrated, and which, Mr. Tytler tells us, the ministers took advantage of, in order to preach fiery sermons suited to the times. It is clear that their motive in this, was to prepare the public mind for the coming tragedy. Unfortunately for Mr. Tytler, however, it is upon record, that this fast was ordained to be celebrated by the General Assembly of the Church, which had three months previously closed its sittings; the subjects of exhortation were expressly stated; a regular treatise for the fast was prepared; and, with general directions to apply their sermons to sins of all times, they were specially to have in view, the calamitous position of the country at that period, by the banishment of the Protestant Lords, the open celebration of the mass, the danger that threatened the existence of the Church, and the insecurity in which the whole Protestant community was placed by the Queen's accession to the Bayonne League. These were the causes that induced the ministers so to preach. These are the reasons assigned by our historians, until we come down to Goodall, who first put upon it a sinister interpretation—(vol. i., p. 248), which "my grandfather" copied, and which the grandson has again transcribed *verbatim et literatim*. The famous scrap of paper is indeed the only part of his story, on which Mr. Tytler can claim the character of genius—thorough originality. On other points he serves up to us the old rinsings of forgotten virulence, distilled in the alembic of an affected impartiality, whose greatest virtue is to hate and despise with the dignity of moderation.

All contemporary history—all the private correspondence of the age of Knox—is silent on the subject of his accession to the murder. We have examined every printed treatise on the subject, and many of the MSS. that still exist, and in not one of the laboured journals, or didactic histories of either enemies or friends—in not one of the numerous letters written for private perusal, and uninfluenced by any sinister purpose, have we been able to find one single inuendo or insinuation to corroborate the

tale. The author of the "Diurnal of Occurrents," who is supposed to have been some person about the Court, and who terms the Queen "the anointed lieutenant of the Lord," while he mentions that Knox left Edinburgh "with ane greit murmyring of the godlie of religioun," (p. 94), does not even hint that he was a conspirator. Melville, the Queen's friend, to whom Knox was sufficiently distasteful, is also silent. The historian of the doings of "James the Sext," who was a Papist, and discovers a partiality for Mary, is equally dumb. Blackwood, who invented as many falsehoods as Hector Boece himself, will not charge Knox, though a "heretic and necromancer," with the guilt of Rizzio's death. Nor is there one remark to this effect, in the three collections of private correspondence from all quarters, and to many different persons, describing minutely the events of this period, published by Sir Henry Ellis, by Mr. Turner, and the Maitland Club, whose volume entitled, "Selections from unpublished MSS. in the College of Arms and British Museum," contains many letters which were before unknown. Crawford, the historiographer of Anne, who gives us the delectable piece of information, that *Bothwell* "was unanimously acquitted, by a very honourable jury, of all suspicion as well as action of murder (of Darnley); not so much as one probable circumstance being adduced against him," (p. 17), will not add another sin to his conscience by accusing Knox of murder. The author of the *Memoirs of Lord Herries*, the defender of Mary, is also mute; so is Spottiswoode, and so is Keith.

Thus, therefore, with all this body of overpowering and invincible negative evidence, we have four distinct lists of the murderers or their accessories, in none of which does the name of Knox appear,—set in opposition to a miserable rag of paper, unsubscribed, unauthenticated, referred to in no letter, author unknown, date *in nubibus*, in short, without one single element of that evidence on which human opinion rests, and without one single recommendation to induce us to treat it with respect, or to give it credibility. If Mr. Tytler is not ashamed of his allies, we are. It is our respect for him that has made us march through Coventry with the "authentic list" and its subordinate arguments. "No eye hath seen such scarecrows; nay, and the villains march wide betwixt the legs, as if they had gyves on. There's but a shirt and a half in all the company, and the half shirt is two napkins, tacked together, and thrown over the shoulders, like a herald's coat without sleeves."

Finally, Mr. Tytler, according to his usual process of assumptive argument, having established that Knox was privy to the murder, slides into the astonishing assertion, that "the *Reformed party* in Scotland did not hesitate to adopt" the scheme "to

break off the Parliament by the murder of Rizzio.”—(Vol. vii., p. 21.) This is multiplication at a rapid rate. The “Protestant Barons” are first accused; in a few pages farther an addition is made in the persons of “the chief ministers;” and in ten lines afterwards, the change is made into “the Reformed party,” (vol. vii., p. 21.) We are obliged to appeal to Mr. Tytler’s own sense of the ludicrous, in regard to the injustice of such reckless writing; and we call upon him to inform us by what privilege he thus considers himself entitled to deal about his violent charges against the illustrious ancestry who have ennobled his country by their virtues?

We have now endeavoured to discharge a duty as disagreeable to us as it can be to Mr. Tytler. We have endeavoured to rescue from undeserved reproach, the memory of a great man; and before quitting the subject, we wish to have a few parting words with the historian. We believe that he is not ambitious of the wholesome discipline of derision, or the severer trial of unceremonious and indignant contradiction. If we appreciate him correctly, we believe him conscious of the value of a strict adherence to facts, and that he knows that the restraints of the ninth commandment strike against the historian of the past equally as against the journalist of the present. He will pardon, therefore, his reviewers, if, when they find no factitious recommendation of philosophy or eloquence, or peculiar neatness of expression in his pages, they are apt to speak with more impatience, and with less periphrasis of the prejudices of mediocrity. Great command of temper is necessary in dealing with a deliberate twisting of authorities, a glozing over unquestioned facts, an omission of what was necessary to the defence, while professing to give it all; insinuation where assertion could not be hazarded, and the integrity of fair argument despised under the guise of a reluctant accusation, and unbounded candour assumed, but never shown. The historian possesses, too, a large amount of obstinacy. He never drops a theory he has promulgated. His account of Wallace, and his speculations as to Richard the Second, have long been gathered to the granary of superficial nothings—and in spite of the ridicule of a hundred pens, they are printed in every edition as at first. In answer to Mr. M’Crie’s letter in regard to Knox, Mr. Tytler states his dogged determination to persevere in the charge he has advanced; and we have therefore the less hesitation in dealing with an opponent so confident in his resources. He must, however, remember, that the fame of the Reformers is something that comes home to the bosom of Scottish affections. It is not a mere matter of metaphysical discussion, or of deep erudition; it is something more directly personal,

and verging on the confines of national dishonour. Like the fabled garden of the Hesperides, the memory of the Reformers is to be kept sacred; and when a reckless hoof enters to lay waste the borders and the bowers, it is a sacred duty to hunt the intruder into incapacity for mischief. While Mr. Tytler insists in printing charges of murder, patiently refuted, he has no complaint to urge if his history be treated as the unwieldy pamphlet of a partizan; and while it ought to be only rational anticipation, it cannot form the subject of wailing or disappointment, when he finds that his oblations to his prejudices, though ushered in with a potent emphasis and voice of authority, have roused only the indignation of his countrymen, and will fail with the rest of mankind as either argument or eloquence.

Mr. Tytler, in truth, could not appreciate the Reformer. The offspring of an obscure race, there was no prestige of noble blood to redeem his errors; there was none of the famous chivalry of the military knight-errants, to make his history romantic. He had no titled name to give dignity to his life; he lived not in a palace, and though a minister, he was not an archbishop or a lord. There was not about him one single characteristic of those, which constitute Mr. Tytler's heroes. He had not enough of genteel respectability; and when the adventures of some titled oppressor are to be had in heaps for the gathering, where is the use of dwelling on the moral preachings and the school-erectations of an uncivilized obscure!

Yet, after all, we beg to ask, when a moment of philosophical impartiality will come, was there not something in the career of Knox, of the same grand originality by which humble birth has only been made a lever to its inheritor for a more exalted rise? We recognize in him the same force of character, the same inflexibility of will, the same patient perseverance, and profound knowledge of human nature, that characterized many of the successful leaders thrown up by the wild surges of revolutions. He knew well how to mould human passions to his will; to arouse the mob, or make them quiescent; to encourage the nobles, or to rebuke them when their courage or their virtue failed. No man can read his speeches, without seeing that each one of them was the skilful composition of a sagacious Antony, moving his hearers according to their dispositions, to revenge not a murdered Cæsar, but a rejected truth, on which their liberties and their religion hung. "His single voice," says Randolph, "could put more life into a host than six hundred blustering trumpets." Audacity in his circumstances was prudence; but he never, in the lowest extremity of his fortune, forgot the distinction between good and evil—never swerved from what was manly and honour-

able; and, if uncompromising in his hatreds, he never expressed them without a warrant, and never thrust himself between a good man's merit and his reward.

He was a man, too, of learning and liberal accomplishment. He exhausted the knowledge which his own country furnished, and travel in other lands completed an education, which embraced the whole range of the learning of his age. His educated taste shines out in the vigorous English of his works, hurried through in the distant intervals of a busy life, and flowing with a purity unequalled in the writing of any contemporary Scotchman, with the exception of Secretary Lethington. His frequent references to all that was then known of polite literature—brought in with the easy unpedantic grace of one who knew his subject—rebuke the unmannered slanderers who can find for him no choicer epithet than a "rustic apostle," incapable of any sympathy with the elegant refinements of polished life. Persons acquainted with his writings, must be surprised at the charge so frequently and so flippantly advanced, that he was a gloomy and bigoted fanatic. Writers like Miss Strickland, who know absolutely nothing of the history of the man whom they malign—and historians like Mr. Tytler, who can see nothing but through the medium of their prejudices—are only working in their vocation when they uphold their caricature for truth. Had they as diligently read, as they have diligently written, about the works of this austere and coarse enthusiast, they would have found his pages filled with passages of the most racy humour, and genuine touches of the most affecting pathos. After the porch is passed—rendered somewhat forbidding by the quaint style of the sixteenth century—we are ushered into a temple of manly thinking, supported by the pillars of a correct morality, and enriched with the decorations of a vigorous fancy and warmth of feeling. In telling us the eventful history of his times, he descends at once from the loftiest to the homeliest key; and while our feelings are hurried away by the touching narrative of Wishart's sufferings, we are obliged, in the midst of it, to laugh at the untimely humour of the historian. When he has raised our excitement by torturing sarcasm or fierce invective—with the thunders of the stern moralist, or the rebukes of the religious teacher—he can at once melt our hearts by a melancholy theme, or chase away our sorrows by a stream of contemptuous jocularity or unsparing ridicule.

We would not defend any man from his cradle to his grave. The brightest sun that ever shone is marked with spots; and the career of the Scottish Reformer presents, in many things, the taint of our fallible mortality. But in the most rigid of our speculations on the bankruptcy of human nature, we certainly

cannot cite him to illustrate its worst or its weakest side. Much has been said and written as to the unusual acerbity of his style. The refined sentimentalists of modern days, in describing it, have equalled the most violent of his declamatory passages. All of them appear to be "absolute gentlemen, of very soft society, full of most excellent differences and great shewing; indeed, to speak feelingly of them, they are the card or calendar of gentry." They appear to forget that the milky blandness of disposition they sketch out, is naturally incompatible with that energy of character ever found in the leaders of revolutions. Luther illustrates the remark; and the generous German, when he was most scurrilous to Tetzels, had yet a kindly feeling to the party on the rack. Against him the same charge has been often adduced, and certainly with more justice than against Knox. It may not be held a complete justification of the latter, that for every harsh epithet he threw he received a ruder in return; and his invectives for undoubted crimes, were met by accusations of crimes he never did. Archibald Hamilton accuses him as guilty of adultery and incest. Another writer mentions, that his maid-servant fainted when, on looking through a hole in the door, "she saw his master, Satan, in a black man's likeness, with him." James Laing also was ready to establish, "*quod patris sui uxorem violarat.*" This same writer also incontrovertibly proves, that Luther was carnally and spiritually begotten of the devil; and Hamilton also mentions the price of penance, as that at which the heretics sold their souls to the enemy of mankind.

But the charge of using railing language, though the common blot of the controversial literature of his age, has been greatly exaggerated as regards Knox. "God is my witness," he said upon his death-bed,— "God is my witness, whom I have served in the spirit in the Gospel of his Son, that I have taught nothing but the true and solid doctrine of the gospel of the Son of God, and have had it for my only object to instruct the ignorant, to confirm the faithful, to comfort the weak, the fearful, and the distressed, by the promises of grace, and to fight against the proud and rebellious by the divine threatenings. I know that many have frequently complained, and do still loudly complain, of my too great severity; but God knows that in my heart I never hated the persons of those against whom I thundered God's judgment." In no case was he too severe with an individual; and the war that he made upon the persecuting hierarchy he overthrew, and the titled spoliators who employed religion to cover their rapacity, it was impossible could be too energetic or determined. In the whole of his writings may be perceived the philanthropist as well as the reformer, who is surrounded with ignorance, superstition, and crime, regretting the follies he seeks

to check, and sarcastic only when he contrasts the degradation around him with the aspirations on which his mind loved to dwell. In Mary's days of comparative innocence, he might perhaps have made greater allowances for bad education, pernicious example, and for that vulgar weakness of the great which preferred French fiddlers and buffoons to the calls of an expansive philanthropy, or the interests of an empire. But if he erred on the side of principle, it was because on such matters there could be no question of compromise, of hesitation, or delay. His, in truth, was a severe masculine morality, grafted on a vigorous stock. It was not nourished or dandled in the school of expediency, nor did it veer round to the irregular impulses of personal feeling, or the varying gusts of popular applause. He stood against the people and the court, alike indifferent to the rude shock of democratic violence, or the fiercest outburst of royal indignation; and the same uncompromising patriot who could, at the foot of the throne, explain the doctrine of just resistance to oppression, could rebuke with equal energy the "rascal multitude" who pushed the principle to unbounded license.

The claim of Knox to our gratitude, or his title to infamy, must, however, be determined on far other grounds than the harshness or melody of his style. He was certainly one of the most conspicuous men of the sixteenth century. Born at a period of wealth-and-rank idolatry, the son of parents so obscure that industry cannot trace them, he raised himself by the native vigour of a determined will, to a position which enabled him to influence the destinies of his country. Birth, station, profession, temper—all were against him; but in spite of every obstacle, he maintained to the last the nearly unbounded influence he had acquired, and was followed to the grave by mourning thousands, who saw in him the rare picture of the whole masculine virtues of constancy, fidelity, fortitude, and magnanimity.

Peace to his ashes!—Honour to his memory! When we think of Scotland at his birth, and as he left it, we are lost in wonder at the change. The people he found in the infancy of their civilization—rude, barbarous, and untutored—rotting under the bad husbandry of misrule—gross and ferocious—often changing their masters, but never their condition—and, like the Romans in their last decline, as they had outlived the reverence for their religion, they freed themselves from professing any. The resources of the country were wasted in ruinous wars; religion was a plaything of fantastic show or public mummary, embodied in an institution having bulk without solidity—with gilded pinnacles at top, and foundations worn away. Its feverish animation when the struggle came, created awe, from the here-

ditary associations it possessed, and the prescriptive reverence it so long enjoyed. But its last activity was only to render its fall the more decided; and it sunk without one among the people to sing its requiem. Neither its ministers, nor any of the population it kept in ignorance, knew anything of the learning which civilizes and refines the world—the arts that instruct, or the manufactures that enrich it. There was, in truth, no one single institution, principle, or system, that had any foundation in the affections of the people, or which, being in unison with their habits, might have been permitted through custom. Unity of feeling only existed in the people to find relief to misery by revenge; and Knox appeared upon the stage when the utter corruption of all morals, and the destruction of all social virtues threatening the total dissolution of social life, announced the approach of a time, in which a tottering society would right itself, by one of those convulsive changes in which history makes ridicule of fiction, by assorting new and strange destinies to mankind.

In the quiet solitude of Geneva, Knox descried the coming change, and with his usual decision he hurried to the scene. He was just the man peculiarly suited to the times. His actions bore the stamp of a far-reaching sagacity. A leader was necessary to give coherence to popular feeling, and to prevent it being frittered away in painful, disjointed, and fruitless effort,—to inspire a young nation with courage, and to mould them by fostering watchfulness into a reflecting people. Let us do justice—bare justice—to the men who effected the Reformation. After that event, we read less of the commission, and more of the punishment of adulteries, and the many crimes that occupy the attention of magistrates and the hundred mouths of scandal. We find a people from whom complaint was universal,—who had lost their independence and even buoyancy of spirit,—the manners, the character, the habits of a free people, elevated at once to a position, from which they could look proudly around on the depression of continental serfs. The orgies of superstition were followed by the celebration of the mysteries of that religion, which they left to a late posterity. They established schools, and purified our colleges; and learning, which had hid itself in long retirement, came forth from its inglorious retreat. Out of the grave of fallen superstition and ruined barbarous philosophy, emerged a gentle spirit, which amalgamated a society convulsed, and created institutions harmonious in their parts, simple in their pretensions, and pure in their character, which still exist, as living testimony to the just and philosophical foundation on which they rest.

The placid stream which now flows in a gentle current, bearing on its breast the fruits of an enlightened freedom, had once

been scattered in fruitless waste in a thousand rills. To direct their powers to a right convergence, was the duty to which the Reformers in resigning themselves, acquired their honourable immortality. It may be true, that in the herald's college they have no blazonry of arms, and their labours cannot therefore extract from sentiment a word of commendation, or their sufferings cause one tear to flow. But they had a pedigree to render them illustrious, and descendants to keep their spirit in existence. They could point for ancestors to the picture gallery of the wise of past generations, who had preceded them in rescuing mankind from the degrading thralldom, by which priests and kings, or the prejudices of a people, have kept in bondage human thought; and for descendants, they will find myriads ready to defend their memory when maligned. The degradations they suffered, were neither caused by forfeiture of public confidence or public affection; they were neither courted by folly or merited by crime; they arose from that iniquity of fortune, which, in the mixed lot of human life, will attend the best of actions, and which, endured with patience or met with fortitude, become the visible rhetoric of their virtues.

It was through them that the happy change came over the moral and mental character of society. Through their instrumentality the universal law of decay, which makes establishments, like life, decline, and whose corrosive influence was gnawing away the vitals of the commonwealth, yielded to the medicinal influence of a better system, which has given us so much healthy feeling, many centuries of ever increasing prosperity, the civilizing influence of literary and commercial greatness, and enabled us to outstrip the nations of the world in all the essentials which constitute a country's happiness. And yet the change was accomplished within the compass of a single life, by a people arriving at maturity, without the dull season of probation, or the inconveniences of adolescence.

Mr. Tytler, in drawing the character of Knox, has no sympathy with moral greatness. He feels not the high supremacy of the virtue of adherence to truth, amid the sneers of friends, the depression of exile, or the terrors of persecution. His heart is cold to the heroism of principle. He cannot appreciate the scene, when the humble minister confronted the Privy Council, deriving additional lustre from his intended degradation, and shewing us how a great man may be ill-treated, but not dishonoured. For the ruin of rank, and beauty, and ancient name, he excites our sympathies, and invokes the full volume of our compassions and our sorrows. He changes the accuser into the accused, and inverts the morality of actions, to obtain a judgment consistent with his prejudices. "On many occasions," he

tells us, "Knox acted upon the principle (so manifestly erroneous and unchristian) that the end justified the means."—(Vol. vii., p. 331.) In vain have we read the History for occasions when he is said to have exemplified the principle, except the death of Rizzio; and in vain will Mr. Tytler urge that charge again upon a startled public. He will deal with it, as he did with his attack on the memory of the martyr Wishart, whom, in an early work, he accused as accessory to the death of Beaton—a charge which in his history he has abandoned, or frittered away in insinuation, which carries with it its antidote; and there we leave it. But he farther tells us, that Knox was "fierce, unrelenting, and unscrupulous."—(Vol. vii, p. 331.) Fierce and unrelenting he ever was—but nothing more than a good man ever must—against any thing that had the appearance of the conventional moralities of Mr. Tytler's heroes, or the crimes of which his heroine was accused. But that he displayed such feelings, as is intended to be conveyed, against what was right, is a charge which not one among the thousand calumniators, who have exhausted their time in invective and investigation, can place upon other authority than their own assertion. In the like spirit we meet the charge of being unscrupulous, which, resting as it does in the vagueness of generality, may be safely left with a general contradiction.

Nine-tenths of the Scottish people will read such things with indignation, and—were it not for the high respectability of the author—with feelings of contempt. They will find some palliation for them in his hereditary prejudices. They will consider it natural enough, that one who has worked eighteen years amid the mouldering records of other days—without being able, after all, to see the importance of that Reformation, which renders its history interesting not only to Scotland, but to mankind—has no sympathies with the recollections of departed worth, which shone out in a high and single-minded philanthropy to the last. They will look upon the author's performance, as they would upon any other of a school, which speaks any language of religion and morals consistent with the innocence of Mary and the infamy of her accusers; and when the interest attached to a new publication, by subsiding, shall have allowed this history to sink to its place of rest, the author will find, to his regret, that his fierce invectives have ruined nothing but the fame he is so anxious to acquire.

Far be it from us to act as the indiscriminate eulogists of Knox. Let his faults be censured with unsparing rigour, but let not his generous sacrifices and his manly courage be forgotten. In condemning justly the severity of his language, let it be remembered that it was a common failing, into which even Erasmus fell; and

in an impartial estimate of his character, do not omit the loveable nature of the man—his humour—his vigorous human-heartedness—the absence of all cant, or affectation, or maudlin extravagance—the utter want of all selfishness, which made him decline a bishopric from the best of princes—and his Christian humility, though the correspondent and friend of monarchs and their ministers. Do not sink into oblivion the fact, that flattery could not diminish his perseverance; that threats increased his ardour; that hatred, obloquy, and scorn—from power, that had the instruments to avenge—from friends, whose attachment was the first object of his affections—and from “his very familiars,” whom his generosity had enriched—were the result of the sacrifice to duty; how he knew the cost, and, to the eternal honour of his memory, paid it to the full.

An impartial writer would narrate how, in the grand carnival of the age, strange masquerades were seen. It was through the Reformer's influence that feudal enmities disappeared—ancient party shibboleths were forgotten—ancient enemies resigned their hatred. The people heard—became convinced—and, by their actions, told the sincerity of their convictions. All former contests were cast aside; all the past wrongs of clanship, transmitted from age to age as a family inheritance—all the license of a demoralized society—were swept away in the new current of enthusiasm, which left the deserted churches of popery, the funeral mementos of departed superstition.

We have now exhausted all our space for any particular examination of Mr. Tytler's history. We could have wished, had we been able, to follow him during the reign of James, when the tide of religious fervour had subsided, and the whole power of Government was employed to raise a bulwark against its flow a second time. This, however, we must leave to the judgment of Mr. Tytler's readers, and shall, at present, close our strictures with a few observations on the general characteristics of the later volumes of this History.

In reading the account of the Reformation, its causes and its results, one's feelings of indignation at the perverted narrative yield to an artistic feeling of anger, at the mode in which the author has spoilt so fine a subject. We would have submitted to abuse had it been boldly done; and the history of the Reformation would not have appeared so utterly distasteful if we could find a thorough appreciation of its importance, whether for good or evil. But the historian seems entirely to have overlooked it. He gives us a few biographies, and forgets the history of a people; and the parties honoured are, of course, the illustrious who had handles to their names. It is absolutely amazing,

with Robertson's introduction to the history of Charles V. before him, how he missed the finest subject for historical dissertation yet left to modern industry. What a noble chapter it would have made, if, instead of all this rubbish of quotation from the letters of Lord Mighty and the Duke of Craft, and the Queen of Policy, he had patiently set himself down to inform us of the state of social existence, and religious feeling and learning, in the eventful years which preceded and followed the Revolution. How interesting it would have been had he followed the example of Robertson with regard to the state of Germany in the days of Luther; had he taken each class of the community and told their story—the private lives of the clergy, for example—their virtues or their venality, their ignorance, their profligacy of manners, their persecuting spirit. How admirably he could have displayed his learning, and amused his readers, by entering their libraries and giving us a peep of the foolish literature lying there; or by introducing us to the conversation of these gross and lazy priests, who slumbered and woke to eat and drink and slumber again. His readers would have laughed with him at their mutual accusations and recriminations; and following them into their private chambers he could have told us many a moral lesson from their secret doings. People are never so wicked as during a general mortality, or the ravages of the plague; and sailors get drunk as the vessel sinks. Hence the numerous incidents such as that which marked the close of the Popish Bishopric of Aberdeen, in which the holy bishop accused the Chapter of lukewarmness towards heresy, and they retorted by calling upon him to cause his churchmen "reform their shameful lives, and remove their open concubines;" and more especially that he, the Apostolic Father himself, "would have the goodness to show an example by abstaining from the company of the gentlewoman with whom he was greatly slandered."—(Keith, *pref.*, p. 11.) Nay, it might not be uninteresting to add a sketch of that most consummate of Popish abominations, auricular confession; and the clamorous canon of a provincial council might be quoted, wherein the confessors were directed to hear the penitent patiently, and not to look too often in the face, particularly if a woman.* He could have added, at the same time, a short account of the mode of generation of new saints, and the concoction of holy relics; and a graphic narrative might be given of the mode in which the humble votaries at the many shrines gazed with wonder at the priestly jugglers, deposited

* "In audiendo confessionem, sacerdos habeat vultum humilem, et oculos ad terras demissos; nec sepius indiscrete faciem respiciat confitentis, et maxime mulieris."—*Can. 76 of the Canons published by Hailes.*

their offering before the image, received a nod from it, and in pious ecstasy retired. Of all this, however, there occurs not a single word; and one, after the perusal of its history, will rise with the most dreamy impression of the gorgeous establishment of the old Papal religion, and with no impression at all of the jolly fathers who gave it a "local habitation and a name."

Mr. Tytler is a lawyer, and upon his professional theme it becomes us to be silent. At the same time, the general unprofessional reader cannot help regretting, that many of the interesting events connected with the history of our legal institutions have been sunk into oblivion. We might, with advantage, have received some information in regard to those dens of iniquity, termed Ecclesiastical Courts, in which the clergy administered "justice," and gathered their tithes, and taught the learned out of an immense book of laws. The subject could have been made amusing, by a few of the *causes célèbres* they decided; and the historian would have found, that the history of private morality and oppression, as there exhibited, would have reflected a far brighter light on the condition of the country, than the most horrific murder story he has told us.

By an easy and natural diversion, he could then have introduced us to the Civil Courts, and given us some idea of their constitution and their privileges, rendered interesting by a few anecdotes as to their corruption and venality, so highly prized by the old barons who hated Cromwell's Commissioners, because "they had no natural feeling, and decided all the same, though one of the parties were of their kith and kin." The nature of the government of Scotland might also have received a passing notice. Some information could have been afforded as to whether there were Officers of the Crown—a Chancellor, a Secretary of State for the Home Department, and one for Foreign Affairs, one for the Borders, and another for the Highland reivers.

Was there not, too, a common people in that perished age, and had they not a history, like the lords and ladies, of whose doings these nine diffusive volumes are the industrious record? They appear, in the historian's estimation, to have been born of oblivion, and destined to oblivion; and their names make no figure in history. Still, it would have been interesting to know, if the blood warmed their hearts, and if they spoke and felt as did the great. In what manner did Donald MacIan Mhor, in the far north, amid the mists of his native hills, wear away the dull monotony of life? Was he clothed in sheep-skins, and did he live by sheep-stealing? Were there wise men, and magicians with the second sight, hard by the Tummell or the Spey, and was that the native land of whiskey then? Farming, too, was in use surely, in these old days; but we cannot extract from Mr.

Tytler, whether our worthy fathers, in the patriarchal style, employed bullocks for the plough, and trod out the corn by the feet of oxen. O! that he had kept in mind the saying of the worthy gentleman, commemorated in the *Voyage to Brobdignag*, when unravelling his everlasting court intrigues,—“He gave it for his opinion, that whoever could make two ears of corn, or two blades of grass, to grow upon a spot of ground where only one grew before, would deserve better of mankind, and do more essential service to his country, than the whole race of politicians put together.”

Or, if we come to the Lowland towns, where dwelt the substantial burghers, plying the busy industry of their respective crafts, why will the historian not tell us something of their quiet happy existence? They courted, surely, and they married; and sometimes they committed crimes, and as often exhibited generous and noble virtues, as the proudest high-born Hidalgo of them all. Were shirts, and shoes, and stockings, among the luxuries, or the comforts merely, of burghal existence? What an interesting story has Guizot, in his history of European Civilization, contrived to rear out of the prosaic existence of the denizens of the cities, who stand amid the gloom of the middle ages, as something superior to the brutality and ignorance of the times; and how admirably does he follow them to their workshops, and to the bosom of their domestic affections, contrasting their happy comforts with the squalid greatness of the roistering baron, whose castle overtopped their city or their hamlet.

The subject is, however, too mean for the Scottish historian, who is above telling us anything of the manners, habits, pleasures, trades, feelings, opinions of this busy, persevering, and intelligent people; nor will he give any information as to their literature. Here, too, a fine chapter has been thrown to the winds. Oppression, weariness, and disgust with the utter abominations of the Romish faith; convictions as to its falsehood, and hatred to its shameless ministers, were the principal causes of its downfall. But the influence of poetry was brought in to excite the fancy; and the ridicule and sarcasm of Lindsay, and “the gude and godlie ballads,” and other productions of the same school, rendered ridiculous what had already been declared sinful. It is said that the songs of Béranger overthrew the elder Bourbons; it is unquestionable that the keen wit of the poetasters, who satirized the priests, effected the strongest impression on the popular mind of Scotland. Yet all that is said upon this subject is contained in three lines—more perhaps than might have been expected; and then the author proceeds to the staple subject of his treatise—the description of a border excursion—some gross oppression, or exquisitely exciting murder. We can scarcely ascertain from this history of

his country, who was Sir David Lindsay, one of the most illustrious men of letters of ancient Scotland ; and the man whose works have delighted many a reader, now shines with an obscure lustre, at the side of some feudal ruffian who had exhibited the superlatives of inhumanity. Gavin Douglas, the Bishop of Dunkeld, the translator of Virgil and part of Ovid—a gentleman—a scholar in the highest sense—a poet who has left descriptive poetry equal to that of any language, is introduced to our notice, not as having immortalized himself by works of genius, but because he had adjusted a squabble between two of the mighty lords. It is, moreover, scarcely conceivable that Mr. Tytler should have spent so many weary pages, in quoting the twaddling scandal of the self-conceited, busy, prying, impertinent English resident, Thomas Randolph, and left unnoticed the labours of William Dunbar, the greatest of the original poets of old Scotland, who, according to Warton, “ adorned the present period with a degree of sentiment and spirit, a command of phraseology, and a fertility of imagination, not to be found in any English poet since Chaucer and Lydgate.”

We need not name others. They have all been contemptuously left in the obscurity of their antiquated phraseology, and their country's historian will not condescend to tell us anything of their language and ours. There never was a history which has acquired such a name as this, so defective upon nine-tenths of the subjects necessary for its construction. Materials, too, lie at hand in inconvenient abundance, for enabling the historian to unroll the history of that world of old, the habits and customs of our fathers, their literature and their religion, their language and their origin, the humble destinies of perished generations, whose hum of busy labour we would hear again, mingling with the chant of the monkish *miserere*. By judicious compression all this might be contained within such a compass as not to extend the work a single page, provided a number of inhuman atrocities were left out, and only a few retained as examples of the rest ; and also under the condition, that two or three hundred of the five hundred pages of dull quotation from State Paper Office correspondence, were consigned to the obscurity from whence it has been dragged.

Mr. Tytler expresses his gratitude to Lord Melbourne for allowing him “ a full examination of the Scottish correspondence in the State Paper Office,” and which he tells us was an event “ the most pleasurable in my literary life.”—(Vol. v., p. 377.) We cannot express the same gratification. There can be no doubt, that several Court intrigues have been thereby divested of their mystery ; but, in opposition to that, we have to set a deluge of matter, on uncontroverted points, told with amazing periphrasis of phrase, to the utter exclusion of half our history. To adopt

the simile of Burke, the historian seized a handful of grasshoppers, which he presents as the riches of the land, while altogether unmindful of the noble oxen quietly browsing around him. Like any other collection of old correspondence, this book will, however, be useful, and it is needless now to continue our wailings as to its omissions. But if, instead of denominating the four last volumes a history, they were described as the biography of Mary Stuart, of Regent Murray, and of Morton, interspersed with sketches of other grandees, and solemn denunciations of the coarse vulgarity and intolerance of Presbyterian ministers, a better idea would be entertained of its character and its object.

This is our History! We grudge not the author the pension it has gained him; he will, perhaps, never receive either from his pension or his profits, remuneration for his labour of eighteen years. It is, therefore, all the more galling to his friends, that we cannot recompense him by our admiration and our gratitude, and are driven to the painful conviction, that the History of Scotland remains to be composed.

ART. II.—*The Entire Works of the Rev. Robert Hall, A.M., with a Brief Memoir of his Life, by Dr. GREGORY, and Observations on his Character as a Preacher, by JOHN FOSTER. Published under the superintendence of OLINTHUS GREGORY, LL.D., F.R.A.S. London, 1832.*

WE do not think the method that was at first adopted to perpetuate the memory and the fame of Mr. Hall by any means judicious. We have a memoir by Dr. Gregory, a character of him as a public man by Mr. Foster, several distinct sketches in pages and half pages by Anderson and others, and subsequently a more elaborate life by Morris, reminiscences by Greene, and various minor contributions, having more or less of merit; consequently, everything relating to him is given in such a piecemeal and fragmental way, that we have neither the pleasure nor the instruction of one masterly and continuous narrative. Gregory's is pleasant, Foster's profound, Morris's heavy, and Greene's frivolous. Scattered and various as these performances are, after the lapse of many years it seemed to us desirable to recall the image of departed greatness in a condensed form, with such new circumstances as personal knowledge might enable us to record, and affection embalm, assured that contemporaries will

never be weary of a subject so cherished, and that the coming age cannot be furnished with many of more instructive and enduring value. What is most truly characteristic often vanishes with the life, which, like the setting sun, leaves only the radiant twilight for a time. To perpetuate these traits, and imprint them for contemplation on the page of a faithful, however abbreviated, narrative, is a grateful task, and not, we trust, unprofitable.

Men of great talent are said seldom to have clever sons; but to this rule the present instance furnishes an exception. The father of Robert Hall was a distinguished minister of the Baptist persuasion at Arnsby, a small village near Leicester; and the more than ordinary resemblance between them, both in the conformation of the head and features, and the order of their mental faculties, might afford some assistance to the dubious in the verification of physiognomical science. Robert (born at Arnsby May 2, 1764) was the youngest of fourteen children, and, in infancy, the feeblest, though afterwards his frame and constitution bordered on the athletic. He was once given up for dead in the arms of his nurse; and it was long after the average time for children before he could walk or talk. In the former faculty he was never a proficient—in the latter he soon became remarkable. Even at a very early period, as we have been informed by those who had the means of knowing, he would frequently entertain the haymakers in the hours of toil, and during their meals, by a conversation rich in sensible observations and sportive sallies, which secured their admiration and love. Happily the precocity of his talent was exempt from the usual fatality of premature extinction. Even at nine years of age he could not be restricted to the narrow limits of village school instruction, but had read and reflected on Butler's *Analogy*, and Jonathan Edwards's *Treatises on the Affections and the Will*. This metaphysical bias he himself attributed to an intimate acquaintance with a humble tailor at Arnsby, whom he represented as a very well informed acute man. From our knowledge of him in after life, we should rather be inclined to say that the dialectical skill and tendencies were in the child, for whom it was sufficient to find a willing listener in the tailor; for it is often characteristic of great and generous minds, to attribute to others as native excellence what in fact is only seen as reflections of their own.

His first tutor informed his father, when his son was only eleven years of age, that he was unable farther to instruct his pupil; and accordingly, after a short interval, he was taken to the boarding-school of the Rev. John Ryland of Northampton, with whom he remained only a year and a-half. The genius of Ryland (the father of the late Dr. Ryland) was of a kind

well calculated to stimulate his son ; nor was it unallied to it in bold conception and eccentricity. In the latter respect, however, his tutor was a meteor of wilder range and fiercer blaze.

In September 1778, he became a member of his father's church, and having given satisfactory proofs of piety and of predilection for the Christian ministry, he was soon after sent to the Bristol Academy, whence, after three years, he was transferred to King's College, Aberdeen. While at Bristol he was highly appreciated both as a student and a speaker. What he did and wrote uniformly bore the stamp of originality ; and his occasional efforts at Arnsby, Clipstone, and Kettering, during the vacations, excited great interest and won him much admiration.

During his college pursuits at Aberdeen, the professors of that period gave the strongest testimonies to his proficiency in the various branches of classical, mathematical, and philosophical study. At the close of his fourth year, he delivered a Greek oration, which obtained for him much local celebrity, and this was followed with the honorary degree of Master of Arts. At Aberdeen he became associated, as well in intellectual pursuits as in close friendship, with Sir James Mackintosh. These eminent men ever after retained for each other sentiments of the highest consideration and attachment. They were so marked at college for their unanimity and attainments, that their class-fellows would often point to them, and say, " There go Plato and Herodotus."

We have not, in the present instance, to contemplate genius struggling amidst counter-working agencies, and making its way notwithstanding the difficulties ; but rather the happy results of a combination of favourable circumstances eliciting and perfecting its powers. That Hall would have surmounted obstacles of no ordinary kind cannot be questioned ; but he was not called to the trial. Under the paternal roof he had the advantage of talent and experienced wisdom to guide his early way ; at the boarding-school he was still powerfully impelled forward by kindred genius and an exalted moral influence ; in the Bristol Institution he enjoyed the tutorship of Hugh and Caleb Evans, both of them distinguished in their day ; at Aberdeen his mental habits were strengthened by the companionship of Mackintosh. Having imbibed a taste for literature and a turn for metaphysical inquiries in these several schools of instruction, not to forget the books he first read, and the intercourse he held with the celebrated tailor at Arnsby, he was providentially preparing for that literary and public career to which he was destined, and which he was by nature adapted to occupy. The bracing effect of that rivalry, and of those friendly discussions in which he and Sir James were wont daily to engage, in their wanderings by the shore or in the fields, was, to one of his order, like the tighten-

ing of the strings of a musical instrument, which, when wound up to the right pitch, was hereafter to pour forth strains of powerful and enchanting melody. Sir James declared of himself, in a letter to Hall, at a distant period, that "on the most impartial survey of his early life, he could see nothing which so much tended to excite and invigorate the understanding, to direct it towards high, and perhaps scarcely accessible, objects, as his intimacy with his honoured friend." Examples of this description have a strong relation to the question, whether genius be an innate and original constituent of the mind, or whether it be only the calling forth, by means of proper cultivation, the rudiments of thought, or the seminal principles of mental superiority, which may be supposed inherent in all rational natures. It is hard to conceive, however, amidst innumerable failures, that mere diligence, attended by whatever advantages, would work out such stupendous results.

At the close of 1783, Mr. Hall received an invitation to become assistant pastor with Dr. Caleb Evans, at Broadmead, Bristol. It was agreed, however, that he should return to his studies in Scotland during the college session of 1784-5. On settling at Bristol, his preaching elevated him to the height of popularity, being the evident product of a mind of extraordinary vigour and cultivation; yet was it deficient in evangelical richness—a circumstance which none afterwards so deeply deplored as himself.

In August 1785, he was appointed classical tutor in the Bristol Academy, a situation which he held with great reputation for more than five years. A painful misunderstanding with Dr. Evans, and some differences of sentiment with the Church, at length facilitated his removal to another sphere of labour. He was invited to succeed Robert Robinson at Cambridge, and went thither in July 1791. From that period, we are informed by one of his hearers, the congregation gradually increased, till in a few years the enlargement of the place of worship became necessary. Members of the University frequently, and in considerable numbers, attended in the afternoons on his preaching. "Several senators, as well as clergymen of the Established Church, received their first lessons in eloquence from his lips."

The progress of the French Revolution, which shook the very foundations of society in England by splitting it into political divisions of opinion, did not more violently agitate any place in the kingdom than Cambridge, which was prolific in controversial pamphlets and social conflicts. Hall's ardent mind became inflamed, and, urged on by a circle of intelligent and active friends, he was induced to resist his natural disinclination to writing, and produced a large pamphlet, under the title of "An

Apology for the Freedom of the Press," which, though composed with rapidity, was full of power, and secured for him much distinction as an author. This early essay is characterized by a manly avowal of liberal principles, communicated in language at once forcible and beautiful, thundering with energy, and lightening with flashes of brilliant eloquence.

The next publication laid the basis of his lasting celebrity as an author,—his discourse on "Modern Infidelity." Independently of its intrinsic excellence, there were several circumstances which contributed to its popularity. It was remarkably well *timed*, and answered a pressing necessity. Between the years 1795 and 1799, many debating societies were formed in London, to which the lower classes were allured on the Sunday evenings, under various pretences, and which became in a short time the nurseries of infidelity. The leaven of impiety spread, and he had reason to fear that not only was the country becoming infected, but that the young among his own people were tending to scepticism. This grieved his pious spirit, and roused into exertion his utmost talent. He first delivered this sermon at Bristol in 1800, and then at Cambridge. His own view of the case is thus expressed in a preface :—

"To obliterate the sense of Deity, of moral sanctions, and a future world; and by these means to prepare the way for the total subversion of every institution, both social and religious, which men have been hitherto accustomed to revere, is evidently the principal object of modern sceptics,—the first sophists who have avowed an attempt to govern the world without inculcating the persuasion of a superior power."

He intimates that it is the immaculate holiness of the Christian revelation which is precisely what renders it disgusting to men who are determined, at all events, to retain their vices.

"The dominion of Christianity being, in the very essence of it, the dominion of virtue, we need look no further for the sources of hostility in any who oppose it, than their attachment to vice and disorder. This view of the controversy, if it be just, demonstrates its supreme importance, and furnishes the strongest plea with every one with whom it is not a matter of indifference whether vice or virtue, delusion or truth, govern the world, to exert his talents, in whatever proportion they are possessed, in *contending earnestly for the faith once delivered to the saints.*"

Another circumstance which contributed to the popularity of this discourse was the extreme virulence of an attack in the "Cambridge Intelligencer," in several letters by Mr. Flower its editor, which were written, as was generally believed, in resentment for the friendly advice of Mr. Hall to alter the tone of his

political disquisitions. About the same time, another attack of equal virulence was made by Mr. Anthony Robinson, in a separate pamphlet. On the other hand, it was lauded by the most distinguished members of the University, celebrated by Dr. Parr in his "Spital Sermon," extolled by individuals of literary eminence, and especially praised by Sir James Mackintosh in the *Monthly Review*, and privately circulated by him, to some extent, among his Parliamentary friends. All this, however, would have been unavailing to give it permanent influence, and its author superior fame, had it not possessed extraordinary merits. In truth it can never be read without profit, and can never perish while the language lasts.

Within a comparatively short period Mr. Hall published two other sermons, remarkable also for their display of talent, and their critical adaptation to the times; namely, "Reflections on War," and "The Sentiments proper to the present Crisis." These will be lasting records of his genius, though the exciting occasions of them have passed away. The few other sermons from his pen, excepting that on the death of the Princess Charlotte, had relation to more private events, though of the deepest interest and importance,—as "The Discouragements and Supports of the Christian Minister," a "Funeral Sermon for Dr. Ryland," with some others. Besides these, he published many miscellaneous pieces, and some controversial writings; but it is not our design either to enumerate or analyze his works. There is not one of them, even the very earliest, that has not his peculiar stamp, the impress of his original mind; and in general they exhibit a remarkable uniformity of excellence, arising, as we believe, from the nice balance of his intellectual powers, the discriminating accuracy of his taste, and the abundant *labor limæ et mora* which he invariably bestowed upon all his productions.

Mr. Hall had always been a great sufferer from a pain in his back, which generally compelled him to recline on sofas, benches, or two or three chairs united, for hours together in a day. This affliction very much increased in 1803, so as frequently to deprive him of sleep, and produce very serious depression of spirits. He was advised to reside some miles out of Cambridge, and only repair thither when officially required. This plan of alleviation was not, however, altogether successful, and the mental malady placed him, in November 1804, under the care of Dr. Arnold of Leicester. In April 1805, he was so fully restored as to be able to resume his ministerial labours at Cambridge, but he lived nine miles from the town. This procedure was injudicious; the seclusion was too entire; and in twelve months another eclipse of reason rendered it necessary to obtain a second course of medical superintendence at the Fish Ponds, near Bristol. It also com-

pelled his resignation of the pastoral charge at Cambridge. These severe visitations were instrumental in perfecting his religious sentiments, and his religious character. His own impression was that he had not undergone a thorough renewal of heart till the first of these seizures. We should hope it was otherwise, and are disposed to believe that his habitual low estimation of himself deceived him on this subject.

After this second recovery, he resided for sometime at Enderby, a retired village in the neighbourhood of Leicester. While there, the author of this article, who was on a visit to him, saw striking displays of his peculiarities both of body and mind. With regard to the former, his temperament was singularly cold and impenetrable to the elements. While sitting together for some hours in a very small parlour, which he had heated by a heaped up fire, and filled to suffocation with the smoke of his favourite tobacco, he suddenly exclaimed,—“Well, sir, perhaps *you* would like a little air.” Then throwing open the window, he deliberately walked round the garden several times without his hat, though he was entirely bald, and while the keen blast of a November afternoon was cutting the flesh like a knife. At an expression of surprise at this endurance both of the heat and the cold, he said, “Why, sir, as to the weather, I am not at all affected; I could undertake to walk both uncovered and barefoot from here to Leicester (five or six miles,) without taking cold. As to the fire, sir, I am very fond of it. I should like to have a fire before, and a fire behind, and a fire on each side.” Whether the yet unsubsidied irritability of his mind might not have exercised some peculiar influence over the physical nature to produce these phenomena, must be left to physiologists to determine; it is certain they existed.

On the ensuing morning, he referred with great interest and emotion to the celebrated article against Missions which had recently appeared in the *Edinburgh Review*, and said that Mr. Fuller had very much urged him to undertake a reply.—“With some difficulty, I yielded, sir, to the solicitations of such a man, and for such a cause. I have, in fact, written about twelve pages; I should like your opinion thus far: will you permit me to read them to you?” He did so; and if memory do not deceive, the power of the argument, the brilliancy of the wit, and the elegance of the diction equalled, if not surpassed, any of his compositions. Yet with all characteristic humility he said—“I think, however, Andrew Fuller would have succeeded better in his way. I wish he had done it himself; but I could not persuade him. I think I can’t finish it now.” So it proved. The document is lost, and probably shared the fate of some of the finest productions of his intellect—that of lighting his pipe!

During his residence at Enderby, Mr. Hall frequently preached in the surrounding villages, and occasionally at Harvey Lane, Leicester, the scene of Dr. Carey's former labours. With the people of this congregation he ultimately associated himself as minister in 1807, and this connexion continued unbroken for nearly twenty years. These were probably the happiest of his life, for in addition to his domestic enjoyments, (he married in 1808,) the attendance on his ministry increased from three hundred to a thousand, with manifest tokens of public usefulness. Without abating in his direct pastoral exertions, he was excited to increased activity in promoting Bible, Missionary, and other important societies. It was here the great luminary rose to its meridian splendour, and diffused abroad its most benignant radiance. "Churchmen and Dissenters; men of rank and influence; individuals in lower stations; men of simple piety, and others of deep theological knowledge; men who admired Christianity as a beautiful system, and those who received it into the heart by faith; men in doubt, others involved in unbelief: all resorted to the place where he was announced as the preacher." During this period, also, were issued several brief but beautiful publications.

On the death of Dr. Ryland, he was invited to succeed him in the pastoral office at Broadmead, Bristol, to which request, after frequent and painful revolutions of feeling, he finally yielded, believing that he was providentially called to this change of his ministerial sphere. Here he attracted great attention, as in other places, though his powers were perhaps a little enfeebled by advancing years; while the happy association into which he was introduced with ministers and laymen of all denominations, and the stimulating effect of those delightful reminiscences which sprung up amongst a few remaining friends of his early life, tended to re-excite his energies, and to shed sunshine over the descending path to the tomb. He still gladdened society by his visits, and pursued his own pleasure and improvement by reading. His favourite classical writers were his frequent resort, while his devotional spirit renewed its vigour by enlarged draughts at the fountain of inspiration. Of the commentators, Matthew Henry was most prized, and daily read in considerable portions. He continued also to practise occasional fasting, which he had begun at Leicester, according to his own testimony, with the greatest advantage. His religion seemed to run parallel with the increase of his personal sufferings, which were progressively severe, especially as he became plethoric and his old complaint in the back strengthened with his decline. A temporary absence at Coleford, in the forest of Dean, appeared to recruit his health, but the effect was of transient duration. He had frequent spasmodic affections of the chest, and immediate dissolution was threatened on the 1st of Ja-

nuary 1831, but it passed off, leaving apparently on his mind more impressive sentiments of the coming eternity. With these, all his subsequent public addresses were deeply imbued; till he engaged in his last service, which was a church meeting, on the 9th of February. On the next day, he had just retired to his study to prepare his usual monthly sermon, in anticipation of the approaching Sabbath of communion, when he was seized with the first of the series of paroxysms which terminated in his death. This solemn event took place on the 21st of February 1831, at the age of sixty-six.

In some of the more private virtues of life Robert Hall was unsurpassed. Of these we do not recollect having seen his *humanity* particularly noticed, though it was in reality a very striking feature of his character. It resulted alike from the benevolence of his affections, and the extreme sensibility of his mind. Two specimens of this are in our recollection at this moment:—The one in the way of resentment, the other of compassion. A certain popular minister in his circle occupied a piece of pasture land attached to his house, in the fence of which a poor sheep had entangled its head, having obtruded it between the rails, without the power of extricating itself. This man, who was excessively choleric, beat the animal until it expired; for which barbarity Hall never could forgive him; and no efforts at reconciliation, though repeatedly attempted by mutual friends, could ever succeed. While the barbarity would doubtless have prejudiced most minds, his acute sensibility for the speechless sufferer led him to treat it as a kind of personal offence to his nature. The other instance was one in which he was endangered by the fall of a horse. The friend with whom he was travelling expressed much anxiety as to any injury he might have sustained, but could elicit no other answer to his repeated questions than—"Poor animal! is he hurt, sir; is he hurt? I hope, sir, the poor horse is not hurt." This was no affectation of kindness; he had too much genuine simplicity of character to render that possible: it was the outpouring of an exquisite sensibility.

To the same general principle may be referred his *politeness*; which was not in him an obedience to the conventional laws of society, but the dictate of a mind alive to the circumstances of others, and a heart full of feeling. He had learned of the Apostle to be "courteous," in the most exalted sense of the term; and always repaid the smallest offices of kindness with exuberant expressions of gratitude.

Considerateness was a remarkable trait of his character. In fact, it was sometimes almost ludicrously punctilious. Among many proofs of this with which the writer of this article was fa-

miliar, he will mention what occurred on one occasion when he accompanied him on a journey to the North. The travellers had taken up their abode at an inn, and while discharging the account the next morning, he said, with some earnestness—"Pay that man a penny, sir, for me." The astonishment and the smile may easily be conceived. He persisted; adding, "I will tell you how it is, sir. I usually burn a rushlight, but forgot to mention it, and being late, I did not choose to disturb any one. So I burnt out the candle, which I am sure was at least worth an extra penny, upon which the landlord could not calculate." This might seem to be a trifling incident, but as indicative of character, deserves to be recorded. Another of a different kind was connected with it. When approaching the town in question, he said—"Now, sir, a very excellent Independent minister resides here, but he is poor. He cannot afford to entertain us, but we should be pleased with his company, and ought, I think, sir, to show him respect. Besides, he would be grieved to hear that we had been in the town, and never thought of seeing him. With your permission, we will secure our beds, order what we should like, and then send to invite him to sup with us at the inn. And there, sir, it is not improbable, some of his friends will have found us out, and we will accept any invitation to breakfast in the morning, where the worthy man will, no doubt, be invited to meet us, and thus he will be spared, and we shall all be gratified."

The *humility* of Hall has been expatiated upon by all who have attempted to describe him. It was, however, humility unallied with ridiculous self-depreciation, and totally remote from every thing like cringing sycophancy. It cannot be supposed that such a man was insensible to his own mental superiority; and in truth the consciousness of it was at times displayed incidentally, but never pompously. Though he would in general repudiate applause, yet there were occasions when he would receive it with an apparent satisfaction. He would frequently inquire of his intimate friends what they thought of his discourses immediately after their delivery; but his manner of doing so, would rather indicate an inward sense of unworthiness and insufficiency, than a desire to obtain approbation. In addition to his own experience, the writer has often heard the late Mr. William Hollick of Cambridge, state, that he usually walked with him to his lodging in St. Andrew Street, on the Sunday morning after service; when Mr. Hall scarcely ever failed to put the question—"Well, sir, what did you think of my sermon?" Mr. Hollick soon discovered, that he almost invariably disagreed in opinion; and often expressly put him to the test, by veiling his own real sentiments. Thus, if Mr. Hollick expressed a high estimate of

the discourse, he would say, "No, sir, I don't think you are right. I think nothing of it; I was not so much at liberty as I could have wished." If the contrary sentiment were uttered, he would say in a half-jesting manner—"Pretty well, sir, I think." These conversations evinced considerable sensitiveness; they also shewed that he had made a tolerable estimate of his own powers; but connected as they were with evident manifestations of piety, they also proved that he was intensely concerned, not so much about his personal reputation, as for the moral and spiritual effects of his ministry. A little incident that has come to our knowledge, affords a further display of this part of his character. A brother minister had on one occasion heard him preach with peculiar satisfaction. A considerable time afterwards he met him; and having a vivid remembrance of the discourse in which he had been so interested, took an opportunity of adverting to it in terms of ardent eulogy. Instead of receiving this approbation with a self-sufficient air, he replied—"Yes, sir, yes; the Lord was with me on that day." But whatever he might occasionally seem before man, (and then even in his most unbent and joyous moments, a person must have had a keen eye indeed who could have detected the little arts of vanity and self-exaltation), his humility appeared to be perfect before God. The simplicity of his expressions, the evident prostration of his spirit, and the fervour of his pleadings in prayer, furnished extraordinary proofs of this characteristic.

We cannot agree with Mr. Foster in the view which he takes of Mr. Hall's devotional exercises, nor indeed with the principle on which his remarks are founded. Mr. Foster appears to have been disappointed because his public prayers did not partake of that intellectual character which distinguished his preaching, but was, as he thinks, the very reverse in respect to concentration and determinateness in the direction of thought; and he "cannot tell on what principle it was that he preferred a manner so different in that exercise from its operation in all other employments." Our conception is, that if his prayers had possessed that character of consecutiveness and intellectuality for which Foster pleads, they would have lost much of their charm and real power. A discourse in which it is proposed to instruct men should be, in our opinion, very different in its general character from the utterances of the heart before God. In the latter case, whatever has the air of laboured preparation, is irrelevant and out of place. Surely one of the great elements of devotion is its spontaneity, its feeling, its simplicity, and, as we may say, its entire artlessness; and we cannot but believe that this vivid conception of the true design of prayer, was the principle in Mr. Hall's mind which Mr. Foster thinks "cannot be

known or conjectured." From this resulted the humble earnestness, the holy aspirations, the awe and the pathos, which characterized his prayers. He, in a sense, laid aside the man and became wholly the saint, whenever he ascended the mount of communion with God. In preaching, he moved in an element of light—in prayer, in the element of love.

So habitually devout and vigorous was his mind, that he was capable of the most sudden and singular transitions from intercourse with man to intercourse with Heaven. The following is a curious instance of this. Mr. Hall had been indulging in that species of innocent merriment and jocularly to which he sometimes yielded; and in the midst of a very humorous story, the clock struck twelve,—in an instant he laid down his pipe, exclaiming, "Sir, it is midnight, and we have not had family prayer." The next moment he was on his knees, absolutely absorbed in devotion, and pouring forth the most solemn and reverential petitions at the footstool of mercy.

Another instance at once of his religious ardour and filial tenderness, occurred at Arnsby on a visit. It was related to the present writer by one of the witnesses. On his way from Leicester he had expatiated on his father's excellences, and the scenes of his earliest days. As soon as he entered the house in which his father had resided, he hastened into the parlour, fell on his knees, and poured forth the most devout and fervent supplications. The two or three individuals who were near speedily withdrew, that they might not interrupt his feeling. Soon afterwards he went into the burial-ground, and dropping on his knees at his father's grave, with his hands extended over the monumental stone and his eyes closed, he offered up an extraordinary series of petitions. Among these he breathed forth an impassioned desire to "join the blessed company above;" and entreated that he might be "permitted to know his departed father in the heavenly world; and that their united prayers, often presented on earth, might be then turned into praise, while they beheld their 'Redeemer face to face together.'"

His writings sufficiently attest the *liberality of his religious views*. In some instances, indeed, he has expressed himself in terms which will be deemed severe; but he was "a lover of all good men," while he firmly maintained his sentiments as a Dissenter and a Baptist. He cultivated much intercourse with many who differed from him in both respects, and never, it is believed, gave them any real occasion of offence. Sometimes he would indulge in a little sarcasm and raillery at their peculiarities; but his wit was the flash of the innocuous summer lightning, attracting rather by its beauty and playfulness, than injuring by its stroke.

He was greatly distinguished for his *conversational powers*, and was generally very communicative. In this respect a parallel might be instituted between him and Coleridge, presenting, however, some striking diversities. Coleridge was more studied in his conversations; Hall more free and spontaneous. Coleridge was frequently involved and metaphysical; Hall simple, natural, and intelligible. Coleridge usurped and engrossed conversation; Hall never did so voluntarily. Coleridge could and would talk upon any thing; Hall required to be more invited and brought out by the remarks or inquiries of others. Coleridge was more profound; Hall more brilliant. Coleridge did not deal in polished sentences, but would continue to talk for hours in a plain and careless diction; Hall was invariably elegant and classical, commonly vivacious and sparkling with wit. Coleridge was sure to be heard; Hall to be remembered. Coleridge had the advantage of a more universal knowledge; Hall of a more unencumbered and clearly perceptive intellect. Each was in his day the first of his class, rarely equalled, and probably never surpassed.

The conversations of Robert Hall abounded in wit, fine discriminations of character, and profound estimates of eminent authors. It would not be difficult to fill many pages with these, but our limits forbid more than two or three specimens.

On being asked if he had read the life of Bishop Watson, he replied that he had, and regretted it, as it lowered his estimate of the Bishop's character. Being asked why, he expressed his reluctance to enlarge upon the subject; but added, "Poor man, I pity him! He married public virtue in his early days, but seemed for ever afterwards to be quarrelling with his wife."

When Christmas Evans, a celebrated Welsh preacher, was in Bristol, he was talking to Mr. Hall about the Welsh language, which he said was very copious and expressive. "How I wish," said Mr. Evans, "that Dr. Gill's works had been written in Welsh!"—"I wish they had, sir," replied Hall, "I wish they had, with all my heart, for then I should never have read them. They are a continent of mud, sir."

On some one observing to him that his animation increased with his years, he exclaimed—"Indeed! then I am like touchwood, the more decayed the easier fired."

An extensive corn-factor in London met him at the house of a friend in Cambridge, who observed that Mr. Hall was very silent at table, and looked very suspiciously at the stranger. On his leaving the room, Hall said—"Who is that person, sir?" His friend informed him he was an eminent corn-dealer. "Do you transact any business with him, sir?"—"Yes."—"Have you sold him anything to-day, sir?"—"Yes, a large quantity of

corn.”—“ I am sorry for it; that man is a rogue, sir.”—“ Oh, you are quite mistaken, Mr. Hall; he is highly respectable, and can obtain credit to any amount in this market.”—“ I do not care for that, sir; get your account settled as soon as you can, and never do any more business with him.” The event verified his physiognomical sagacity. In about twelve months afterwards this very person defrauded his creditors and fled the country.

His opinion of Barrow was thus expressed: “ He is very imperfect as a preacher, sir. His sermons are fine lectures on moral philosophy; but they might have been heard by any man for years together without his receiving any just views of his situation as a sinner, or any comprehensive knowledge of the leading doctrines of the gospel. All his appeals were directed to one faculty: he only addressed himself to the understanding, he left the affections and emotions untouched. Hence, from one faculty being kept in constant and exclusive exercise, he is read with extreme fatigue. I never could read his productions long together.” One in the company said—“ But you must allow, sir, that he exhausts his subject.”—“ Yes, he does that completely, sir, and his reader also at the same time.”

We are aware, however, of the rapid evaporation which takes place in the spirit of such details when committed to paper, and shall therefore desist. The eye, the tone, the manner, are all absent. To give them is like painting Niagara, neither the sound nor the motion are there.

If the subject of biography possessed some one pre-eminent excellence or glaring defect, the task of description would be considerably lessened in difficulty, the excellence or the defect forming so characteristic a peculiarity as to aid the conception of a perfect likeness. But, in the present instance, little or no such help is afforded. The great qualities of Hall existed in the rarest combination. Men of talent have usually been celebrated for some one, or for a few powers of mind in more than ordinary vigour, and these predominant faculties have commonly been associated with disparaging deficiencies; a circumstance which has naturally suggested the classification of intellect, and the balance of proportion. Here, however, we have a union, and that with very little perceptible difference of vigour, between the various powers. All seemed to be of the highest order, and to move in entire harmony; so that in attempting an analysis of this fine edifice of mind, we resemble persons who should take the stones of a building one by one, or separate the pillars and the ornaments, which are found each complete in its kind, yet to be only estimated in their unbroken connexion and arrangement.

There was in Hall a singular mixture of the philosophic and the poetic; the acuteness of the one, and the imagination of the

other. Under the influence of the former, had he devoted himself to logic and metaphysics, in accordance with his earliest tendencies, he might have ranked with Locke, Des Cartes, Cudworth, Clarke, Reid, Dugald Stewart, and other reasoners, the acutest and most refined. Had he employed himself in the researches of philosophy and criticism, his penetration would have rivalled the etymologists and searchers into language, and he might have added to the list of the Bentleys, the Buxtorfs, and the Kennicotts. The testimony of a very competent witness, Dr. Hutton, who heard him in a casual conversation expatiate on Barrow's *Disquisitions on Mathematical measure*, and on the genesis of curves by motion, as taught by Barrow and Newton, would tend to the conclusion that had he pursued those subjects he might have participated in the triumphs and the fame of the most eminent men. Had he been educated for law, and trained for Parliament, there can be little question that, with all his disadvantages of voice, his name would have been associated with the first of our Senatorial orators. He would have displayed in felicitous combination much of the splendour of Burke, the wit of Sheridan, the flow of Chatham and of Pitt, and the eloquence of Fox. We have already stated that he was distinguished for the imaginative as well as philosophical faculties. This is evident in the use he makes of figurative language in his writings, and was conspicuous in the appropriate though somewhat rare employment of them in his public discourses. We are inclined to believe that imagination was one of the chief constituents of his mind, and that it gave intensity to his sarcastic powers. His compositions evince the element of poetry as a basis of his mind. If his ear was not tuned to sounds (he was not musical,) there was melody in his soul; and nothing in this point of view can be more delightful than to listen to those fine strains of mingled piety, pathos, and true poetry of sentiment and feeling, that often occur in his works. Take the following specimen. It is the concluding part of the funeral sermon for Dr. Ryland :—

“ If the mere conception of the reunion of good men, in a future state, infused a momentary rapture into the mind of Tully; if an airy speculation—for there is reason to fear it had little hold on his convictions—could inspire him with such delight, what may we be expected to feel, who are assured of such an event by *the true sayings of God!* How should we rejoice in the prospect, the certainty rather, of spending a blissful eternity with those whom we loved on earth, of seeing them emerge from the ruins of the tomb, and the deeper ruins of the fall, not only uninjured, but refined and perfected, ‘with every tear wiped from their eyes,’ standing before the throne of God and the Lamb, *in white robes and palms in their hands, crying with a loud voice,*

Salvation to God that sitteth upon the throne, and to the Lamb, for ever and ever! What delight will it afford to renew the sweet counsel we have taken together, to recount the toils of combat, and the labour of the way, and to approach, not to the house, but the throne of God, in company, in order to join in the symphonies of heavenly voices, and lose ourselves amidst the splendours and fruitions of the beatific vision!

“To that state all the pious on earth are tending; and if there is a law from whose operation none are exempt, which irresistibly conveys their bodies to darkness and to dust, there is another, not less certain or less powerful, which conducts their spirits to the abodes of bliss, to the bosom of their Father and their God. The wheels of nature are not made to roll backward; everything passes on towards eternity; from the birth of time an impetuous current has set in, which bears all the sons of men towards that interminable ocean. Meanwhile, heaven is attracting to itself whatever is congenial to its nature, is enriching itself by the spoils of earth, and collecting within its capacious bosom whatever is pure, permanent, and divine, leaving nothing for the last fire to consume but the objects and the slaves of concupiscence; while everything which grace has prepared and beautified shall be gathered and selected from the ruins of the world, to adorn that eternal city *which hath no need of the sun, neither of the moon, to shine in it, for the glory of God doth enlighten it, and the Lamb is the light thereof.* Let us obey the voice that calls us thither; let us *seek the things that are above*, and no longer cleave to a world which must shortly perish, and which we must shortly quit, while we neglect to prepare for that in which we are invited to dwell for ever.”

During the latter years of his life, Robert Hall was brought, by his removal to Bristol, into close association and friendship with another of the most eminent writers of his age, John Foster. They constituted together a kind of double star in the moral firmament—but the light they emitted, though in both cases resplendent and benign, exhibited striking varieties. Their principles were similar, but their tastes were different. Both were literary benefactors to their country, each in his own way. Each had the greatness to estimate and admire the other's greatness, but neither was capable of being an imitator; the attempt in either case would have been self-destructive. As a thinker, Foster was the most profound. His mind was a fathoming line, which he perpetually employed in penetrating the depths of sentiment, and fetching up the purest gems. Diving to those profundities seemed easy to him, and he could extend the search to places far beyond the reach of most, even distinguished intellects. He was not like Coleridge, who would lose himself and others in metaphysical subtleties, or shapeless imaginings; but he had, with some exceptions, the clearest idea of what he intended to unfold, and could plunge into the deepest waters with his eyes open. Although Hall had a mind full of brilliant con-

ceptions, and a mind, too, which would never miss its way in the darkness, yet it was not capacitated to go down so low—to the very bottom, as it were, of thinking—as that of Foster. He would not go or stay long where imagination could not light his path, or revel, as the latter did, in the naked elementary forms and philosophy of truth. In the art of communicating, however, Foster was inferior. His style has few graces, and is not unfrequently involved. He seems to work, but not to win his way. He aims to convince, but not to please. He would force the judgment into subjection, but aims not to carry captive the taste and the fancy. In Hall the very reverse of this is observable. He imparts the sublimest truth in a graceful manner. Secure of his thoughts, he seeks to beautify and embellish them. His words are carefully chosen, assiduously collocated and formed into brilliant sentences. His language is rich and full of melody. It seems instinct with the vigour, purity, and flexibility of his conceptions, and flows as if by necessity, into courses of varied beauty and grandeur. As the subject requires, it is smooth as the river, and rushing as the cataract. He is seen at once glowing with the majesty of thought, and the mastery of language. In reading Foster, you want Hall's illuminations; in reading Hall, you want Foster's bottoming power.

Two things, at least, seem essential to the formation of a good style, namely, a thorough acquaintance with classical literature, and a refined taste in the art of composition. In these respects Robert Hall surpassed his friend, who was very little addicted to what is strictly termed elegant learning, and who felt no great concern about the order of words and the euphony of language. To attain his end Hall would generally compose for the press with Johnson's Dictionary before him, to assist in the use of terms, and in the balancing of synonyms. He was familiar with the Greek and Latin writers, having read them with critical attention. The writer of this article has heard him state that he had perused everything in Greek literature; and, on a visit, he had the opportunity of examining his copy of Plato, in whose writings he much delighted, which everywhere bore the marks of a studious perusal, by frequent pencil observations on the margin. The *Iliad* and *Odyssey* were repeatedly and diligently examined. It cannot be questioned that the beautiful combinations of words in Homer gratified his taste, and stimulated his efforts at verbal perfection.

This extraordinary man appeared, however, in his noblest character in the pulpit. To the ministry he was early devoted; and, by his habits of mental and moral cultivation, he became gradually prepared for its occupation. Of all the aspects in which he is presented to us, there is none so imposing and so

important as that of the Great Preacher. Here he was unrivalled and alone.

In glancing at the divines of our own country, and of a more modern period, it would be easy to advert to the rivalry of their peculiar powers. We might descant upon the hortatory pungency of Baxter, the clearness of Tillotson, the gorgeous brilliancy of Taylor, the elaborate comprehensiveness of Barrow, the divine energy, singleness of aim, and spiritual mindedness of Howe, the argumentative perspicuity and force of Horsley, and the fervid eloquence of Whitefield; and, to come nearer, without touching the living, the simplicity, calmness, and vivid perceptions of Richard Watson, the enchanting sweetness and spiritual elevation of Pearce, the pathos and solemnity of Fuller. But while admitting and admiring the superiority of some in the peculiarities for which they are most celebrated, we cannot fix on an individual amongst them all who displayed so much of that union and concentration of various faculties of mind, which rendered Hall illustrious. In a considerable degree he appeared to have every quality named. He had pungency, clearness, brilliancy, comprehensiveness, energy, argumentative force, eloquence, simplicity, enchanting sweetness, devotional elevation, pathos, and solemnity. But his greatest peculiarity was, as we have intimated, the rich and perfect combination of qualities. Like the bow of heaven, every colour was there, and in harmony.

We may, perhaps, be reminded of the most celebrated French preachers; and their pretensions are undoubtedly of the very first order. One of them—Saurin—stands alone as a Protestant; three as Catholics, are usually named together, Bossuet, Bourdaloue, and Massillon.

Saurin is described as having a strong, clear, and harmonious voice. He practised two oratorical *artifices*—using that term in the best sense,—namely, that of beginning his discourses in a low and subdued tone, and that of pausing at the end of sentences to observe the effect upon his hearers. He wept from pure feeling, in addressing the wicked. This we could easily imagine from examining the appeals in his published discourses; but they would not at all suggest the description given by one who heard him. “His preaching resembled a plentiful shower of dew, softly and imperceptibly insinuating itself into the minds of his numerous hearers, as the dew into the pores of plants, till the whole church was dissolved, and all in tears under his sermons.” In almost all his productions he displays great metaphysical subtlety, which one would scarcely suppose to flow in so soft a method. Here too, in fact, is discernible his greatest fault, for he appears to raise difficulties in order to solve them.

In the general course of his argumentation there is an air of vivacity and glowing energy, and in his appeals, ardour, pungency, and force. His mode of winding up a discourse by reiterations and amplifications of a portion of the text, or some one prominent idea, is powerfully impressive.

Bossuet, though eminent, is worthy of more admiration as an acute controversialist and sagacious historian than as a pulpit orator. He has indeed many noble passages which shew that he had great strength of pinion, and but for his prejudices and adulatory spirit would have soared much higher. He abounds in exclamations, apostrophes, and fulsome flattery to the great. We are tired in him and other French eulogists of "*Grande Reine*," "*Auguste Monarque*," and the offensive particularities introduced in celebrating the Virgin Mary, the Apostles and Saints. But, with all these extravagances, there is much force and grandeur; and though he often descends to the very ground, he must not be denied his distinguishing epithet of the "*eagle of Meaux*."

Bourdaloue has, by some critics, been assigned a far more eminent place in the temple of fame than Bossuet; not only because he is much freer, and, indeed, almost entirely free, from the faults to which we have just adverted, but on account of the solidity and earnestness of his reasonings, the beauty of his arrangements, and the novelty of his thoughts. He displays great resources of mind, has much of point and power, and sounds with great effect the note of alarm. But notwithstanding his fertility, the energy and eloquence of Bossuet at times render it difficult, in adjudicating their respective merits, to assign to either a very extraordinary superiority.

In speaking of Massillon, we hazard little by saying that he was the prince of French preachers, and as in writing, so in the character of his pulpit discourses he must be regarded as approaching nearer than any other in resemblance to Robert Hall. They appear to have been similar in their methods as preachers, and there are strong analogies in their compositions. The entire description of Massillon by D'Alembert, on his admission into the Royal Academy of Paris, might with little alteration be applied to Hall. He attracted and edified all classes of men, for though he commonly spoke in a language clear from its philosophical accuracy and reasoning, and in the highest degree both refined and eloquent, he spoke to the heart, and united pathos with sublimity, and his character for benevolence and pastoral fidelity, was as bright as his genius.

It is always interesting and instructive to compare the productions of kindred minds. We may be assisted therefore to judge of these two extraordinary preachers, if we bring into juxta-

position one of the most celebrated passages produced by each. Without further comment upon them we shall just remark that Massillon's appears most powerful in application, and Hall's most brilliant in conception,—

"I figure to myself," says Massillon, "that our last hour is come—the heavens are opening over our heads—time is no more, and eternity has begun. Jesus Christ is about to appear to judge us, according to our deserts, and we are here waiting at his hands, the sentence of everlasting life or death. I ask you now—stricken with terror like yourselves, in no wise separating my lot from yours, but placing myself in the situation in which we must all one day stand before God our judge—if Christ, I ask you, were this moment come to make the awful partition of the just and the unjust, think you that the greater number would be saved? Do you believe that the numbers would even be equal? If the lives of the multitude here present were sifted, should we find among them ten righteous? Should we find a single one?"

One can scarcely wonder at the instant effect which, according to Voltaire, was produced on the congregation. The whole assembly started up from their seats, and interrupted the preacher by murmurs of surprise and acclamation.*

* We have given the passage in the most condensed, and, we think, the most powerful form in which it has appeared. It is most probably the nearest to what it was when first pronounced. Massillon, however, expanded it, we suppose, in passing through the press, and introduced other striking considerations. Whether these were real improvements others must decide, but it is due to the illustrious author that we should give the original, in what he at least deemed the amended character of it. "*Je suppose que c'est ici votre dernière heure et la fin de l'univers ; que les dieux vont s'ouvrir sur vos têtes, Jésus-Christ paroître dans sa gloire au milieu de ce temple, et que vous n'y êtes assemblés que pour l'attendre, et comme des criminels tremblants, à qui l'on va prononcer, ou une sentence de grâce, ou un arrêt de mort éternelle : car, vous avez beau vous flatter, vous mourrez tels que vous êtes aujourd'hui ; tous ces desirs de changements qui vous amusent, vous amuseront jusqu'au lit de la mort ; c'est l'expérience de tous les siècles ; tout ce que vous trouverez alors en vous de nouveau, sera peut-être un compte un peu plus grand que celui que vous auriez aujourd'hui à rendre ; et sur ce que vous seriez, si l'on venoit vous juger dans le moment, vous pouvez presque décider de ce qui vous arrivera au sortir de la vie.*"

"Or, je vous demande, et je vous le demande, frappé de terreur, ne séparant pas en ce point mon sort de vôtre, et me mettant dans la même disposition où je souhaite que vous entriez ; je vous demande donc : Si Jésus-Christ paroisoit dans ce temple, au milieu de cette assemblée, la plus auguste de l'univers, pour nous juger, pour faire le terrible discernement des boucs et des brebis, croyez-vous que le plus grand nombre de tout ce que nous sommes ici fût placé à la droite ! croyez-vous que les choses du moins fussent égales ! croyez-vous qu'il s'y trouvât seulement dix justes, que le Seigneur ne put trouver autrefois en cinq villes tout entières ! Je vous le demande, vous l'ignorez, et je l'ignore moi-même ; vous seul, ô mon Dieu ! connoissez ceux qui vous appartiennent, nous savons du moins que les pécheurs ne lui appartiennent pas. Or, qui sont les fidèles ici assemblés ! les titres et les dignités ne doivent être comptés pour rien ; vous en serez dépouillés devant Jésus-Christ : qui sont-ils ! beaucoup de pécheurs qui ne veulent pas se convertir ; encore

We subjoin the magnificent passage of Hall, selected from his funeral sermon for the Princess Charlotte of Wales :—

“ Eternity, it is surely not necessary to remind you, invests every state, whether of bliss or of suffering, with a mysterious and awful importance entirely its own, and is the only property in the creation which gives that weight and moment to whatever it attaches, compared to which, all sublunary joys and sorrows, all interests which know a period, fade into the most contemptible insignificance. In appreciating every other object, it is easy to exceed the proper estimate; and even of the distressing event which has so recently occurred, the feeling which many of us possess, is probably adequate to the occasion. The nation has certainly not been wanting in the proper expression of its poignant regret at the sudden removal of this most lamented princess, nor of their sympathy with the Royal family, deprived by this visitation of its brightest ornament. Sorrow is painted in every countenance, the pursuits of business and of pleasure have been suspended, and the kingdom is covered with the signals of distress. But what, my brethren, if it be lawful to indulge such a thought, what would be the funeral obsequies of a lost soul? Where shall we find the tears fit to be wept at such a spectacle? or, could we realize the calamity in all its extent, what tokens of commiseration and concern would be deemed equal to the occasion? Would it suffice for the sun to veil his light and the moon her brightness; to cover the ocean with mourning, and the heavens with sackcloth? or, were the whole frame of nature to become animated and vocal, would it be possible for her to utter a groan too deep, or a cry too piercing, to express the magnitude and extent of such a catastrophe?”

Mr. Foster has adverted with great keenness of observation, and we think with justice too, to the defects of Mr. Hall's preaching, in reference to the hearers, remarking, that the crude admiration which can make no distinctions, never renders justice to what is really great. He notices that it was too general and theoretic; that it presented things too much in unbroken breadth and mass; that it was apt to exceed, in the most eloquent parts, the allowed license of exaggeration; that it was not kept in due relation to the realities of life; that while it was most excellent in the discrimination of topics, sentiments, arguments, it did not

plus qui le voudroient, mais qui diffèrent leur conversion; plusieurs autres qui ne se convertissent jamais que pour retomber; enfin un grand nombre qui croient n'avoir pas besoin de conversion: voilà le parti des réprouvés. Retranchez ces quatre sortes de pécheurs de cette assemblée sainte, car ils en seront retranchés au grand jour: paroissez maintenant, justes; où êtes-vous? restes d'Israël, passez à la droite; froment de Jésus-Christ, démelez-vous de cette paille destinée au feu: ô Dieu! où sont vos élus! et que reste-t-il pour votre partage!”

ŒUVRES DE MASSILLON, Tom. iii., p. 811-12. 8vo. Paris, 1821.

discriminate and individualize human characters; and therefore it did not maintain an intimate commerce with the actual condition of the hearers. One thing may be remarked, however, in some degree of abatement of these severities of a friendly criticism, that probably Mr. Foster rarely if ever heard him address a very humble village congregation, when many of these blemishes would vanish amidst the clear and holy light of truth, set forth with the utmost simplicity and earnestness. On public occasions, and in his general ministrations, these defects would shade the moral splendour and dignity of the preacher, and ought the more to be remembered, that they may furnish important practical instructions to the evangelical prophets.

The text of his discourse was usually announced in the feeblest tone, chiefly from an incapacity of voice, and in a rapid manner, so as frequently to be inaudible to the majority of the congregation. He then introduced the general topic in a calm perspicuous statement, remarkable chiefly for its simplicity, and not often calculated to give a stranger any promise of what was to come. It seemed to be marked by no effort; frequently consisting of an exposition of the context, with a few plain observations. At times, however, he would commence with some important sentiment, striking the attention at once, and making the rest of his discourse a continual development of some fine train of thought which lay embedded in his own mind, and became every moment more visible as he disclosed it by a course of close, consecutive, and convincing reasoning. His most metaphysical addresses would gradually merge into earnest appeals. After the exordium, he would commonly hint at, rather than explicitly announce, the very simple divisions of the subject on which he intended to treat. Then his thoughts would begin to multiply, and the rapidity of his utterance, always considerable, would increase as he proceeded and kindled—evidently urged on by the momentum of his conceptions. He had no oratorical action, scarcely any kind of motion, excepting an occasional lifting or waving of the right *hand*; and in his most impassioned moments, an alternate retreat and advance in the pulpit by a short step. Sometimes the pain in his back, to which he was so great a martyr, would induce him to throw his arm behind, as if to give himself ease or support in the long-continued, and, to him, afflictive position of standing to address the people. Nothing of the effect which he produced depended on extraneous circumstances. There was no pomp, no rhetorical flourish, and few, though whenever they did occur, very appropriate images; excepting towards the close of his sermon, when his imagination became excursive, and he winged his way through the loftiest sphere of

contemplation. His sublimest discourses were in the beginning didactic and argumentative, then descriptive and pathetic, and, finally, in the highest and best sense, imaginative. Truth was their universal element, and to enforce its claims was his constant aim. Whether he attempted to engage the reason, the affections, or the fancy, all was subsidiary to this great end. He was always in *earnest*—profoundly in earnest. He lost himself in the glories of his theme; and amidst the fervours of his eloquence, the force of his argumentation, and the beauty of his diction, it was manifest that his supreme aim was to “win souls to Christ.”

Notwithstanding many hesitations at the outset, there was a continual flow—a flow of elegant expression, exquisite turns of thought, pure sentiment, and exalted feeling. Among other qualities of his public speaking, it was one of the most extraordinary that, even while the rapidity of the utterance was such as almost to outrun the apprehensions of his hearers, every word, though by no means minutely premeditated, was as proper in itself, and as beautifully collocated, as if it had been the result of long and laborious consideration. He could touch at will the inner springs of emotion, dive into the recesses of the mind, expose sophism, vanquish error, and stem the fierce revolt of prejudice; and with equal success could he speak to the experienced and aged Christian, awakening at a touch his liveliest and holiest sensibilities, imparting consolation to the troubled mind, unfolding the mysteries, while he breathed the spirit of the gospel, dissipating the influence of evil agency, encountering the efforts of inherent corruption, opening Heaven to view, making its glories palpable, and by leading you through the gates of the celestial city, rendering the enchanted hearers conscious of strange joys, which seemed not to belong to earth, but to some more elevated state of existence. Then the bodily organs would appear to be almost incapable of furnishing a channel wide enough for the stream of thought, which expanded as it flowed, till it spread as into an ocean glowing with the morning light of eternity.

ART. III.—*Undersøgelses-Reise til Østkysten af Grönland, efter Kongelig Befaling udført i Aarene 1828-31, af W. A. GRAAH, Captain-Lieutenant i Soe-Etalen. (A Voyage of Discovery to the East Coast of Greenland, undertaken by Royal Command, in the years 1828-31, by W. A. GRAAH, Captain-Lieutenant in the Navy.)* Copenhagen, 1832.

THE expedition which is now in Lancaster Sound in search of a passage round the north coast of America into the Pacific, is of great commercial importance, independently of its main object. The *Erebus* and the *Terror*, fitted out, manned, officered, in the most effective style, are provided with steam-power and screw-propellers, as well as the usual equipment of sailing vessels of their class. This is the first application of steam-power to geographical discovery in those regions. In the latitudes in which the sea is obstructed with small floating ice, the ordinary machinery of paddle-wheels would be altogether inapplicable to navigation; but the screw seems peculiarly adapted to the wants of a vessel beset in the ice, a situation which the power of steam would evidently give the means of avoiding or escaping. The value of this power in navigating in the polar seas was acknowledged, but the usual machinery of paddle-wheels was so evidently liable to be clogged or broken in the ice, that no vessel fitted out for the whale fishery was ever provided with steam-power. In the ordinary business of the whale fishery, the command of the vessel independently of calms or contrary winds, would be of the greatest importance for following the boats in search of fish, or passing through the narrow lanes of water in the ice-fields which lead to open water in which the fish are found. This expedition, under a commander so well acquainted as Sir John Franklin with what would be useful in navigating through the ice in high latitudes, will bring to the test the applicability of steam-power to the whale fishery. It may be the most valuable result of this voyage of discovery.

The northern coast of the American continent, from Behring's Straits eastwards, has been traced by Captain Belcher, by Captain Franklin—whose land journey connected Captain Belcher's farthest advance eastward with the mouths of the Mackenzie River—and by the lamented traveller the late W. Simpson of the Hudson's Bay Company's service, who carried on this sea line of the American coast to the Great Fish Estuary. What remains to be explored is the coast from the most easterly point of Mr. Simpson's advance, to the most westerly point

reached by our navigators, who penetrated into Lancaster Sound in search of a north-west passage. If we had only the ordinary means of discovery and navigation in our hands,—vessels propelled by wind and tide,—it might reasonably be asked, whether our Government is justifiable in again fitting out ships filled with human beings, who leave at home a wide circle of anxiety and sorrow for their fate, to encounter an almost certain death in the most hideous and appalling form in which death can assail the living, healthy man,—that of starvation in an ice-bound sea. The escape of Captain Ross, when even Government had given up the attempt to rescue him or to discover his fate,—the escape of Captain Franklin by land from a death of starvation, should be a warning to Government not lightly to expose the bravest of its officers and men for objects rather of scientific curiosity than of practical utility. But the application of steam-power in the expedition of the *Erebus* and *Terror* reduces the danger, and furnishes a new element in the navigation of the northern ocean which it is the duty of an enlightened Government to use for the great end of discovering a practicable communication between Europe and Asia round the northern coast of the American continent. A passage between the coast and the ice-barrier which besets it, or a passage through the zone of ice which encircles the globe in a high latitude, enclosing, it is supposed, an open sea within, is not impossible with the new means which Providence has bestowed on man for exploring the earth. Should no other discovery be made than that there is no practicable passage to be discovered, it is an object worthy of a great nation to ascertain this point, and to know the face of the earth which the Almighty has given man to inhabit. If it can be done without any wanton and evident exposure of human beings to greater risk than the benefit would warrant, (and with steam-power the risk is reduced and the chance of success increased,) the accomplishment of this passage would be a great era in the history of the human race.

Looking with great interest for the issue of this expedition of the *Erebus* and *Terror*, we were naturally led to inquire what other countries have done during this half century in the field of discovery in the northern hemisphere. France sent a frigate, the *Astrolabe*, if we are not mistaken in the name, about the year 1840, to prosecute discovery in the northern Atlantic, and plant the tricolor flag on the Pole. A ball to the ladies of Reykavik in Iceland, another to the fair at Alten and Hammerest in Norway, a landing at Bell Sound in Spitzbergen, and a distant view of Berendt or Cherry Island, appear to have been all the achievements of this voyage, although the vessel carried a

naturalist, a draughtsman, and an historian to record the discoveries. The object of the French Government in sending out this expedition was probably to display the French flag on coasts on which it was forgotten, as the vessels were not prepared for encountering ice, and the range of their voyage of discovery was not beyond that of a gentleman's summer cruise in his yacht. If discovery was the object, it was a total failure.

Denmark claims as her own the vast peninsula called Greenland, included between the great inland sea of Baffin's Bay and the northern Atlantic, and which, commencing in the hitherto unknown north, ends at Cape Farewell, in latitude 59. 48. N. Within Davis' Straits, leading to Baffin's Bay, and of which Cape Farewell and the western coast of the peninsula of Greenland form one side, and Labrador, Cumberland Island, and America the other, the Danish Government, or rather the Danish Greenland Company trading with a monopoly from the Government, has ten or twelve small stations or colonies from Fredericthal, the nearest settlement to Cape Farewell, in latitude 60. N., longitude 44. 38. W. of Greenwich, to Uppernavik, the most northerly settlement, on an island in latitude 72. 48. N., longitude 55. 54. W. The coast between these two points is surveyed, and laid down in sailing charts, as far as the Whale-fish Isles, at the south end of Disco Island, in latitude 68. 59. N., longitude 53. 13. W., where the Erebus and Terror parted with their transport on the 18th July. The coast from the south end of Disco Island to the Women Islands, of which Uppernavik is one, seems to be as yet only in sketch, or known only in prominent points. The coast on the other side of Cape Farewell, the east coast of the peninsula of Greenland, was not known at all previous to this voyage of Captain Graah.

It appears from the instructions of the Royal Commissioners to Captain Graah, that this voyage of discovery had two objects. The one was to explore the coast of East Greenland, that is the coast of the peninsula of Greenland bordering the Atlantic, and opposite to Iceland, from Cape Farewell at the entrance of Davis' Straits, up to latitude 69. 0. N., at which in 1822, Captain Scoresby had seen and fixed the position of a headland, which he called Cape Barclay, in latitude 69. 13. N., and longitude 24. 25. W. That enterprizing navigator had, in 1822, made this coast in latitude 73. 0. N., and had visited and fixed many points of it. When he left it at Cape Barclay, in latitude 69. 13. N., he was of opinion that he could have run down the coast all the way to Cape Farewell, as he saw no insurmountable obstacle from ice when he left it. The object of his voyage, however, which was an ordinary whale fishing adventure, did not permit him to make the attempt. To determine this point, and to lay down the coast from

Cape Farewell to Cape Barclay, from which, northwards, Captain Scoresby had given an outline with several well determined points, was the object of Captain Graah's voyage, as a voyage of maritime discovery. The voyage had also an antiquarian object.

This east coast of Greenland was long considered to have been the seat of a flourishing Icelandic colony, with towns, churches, bishops, and 190 parishes, or parish divisions. Monasteries, a cathedral, and endowments of land for their support, and all the civilization known in other northern lands in the 14th century, existed here; but in the beginning of the 15th century all communication ceased—was cut off apparently by the accumulation of ice which prevented all access. There were not wanting, in the last century, people who imagined that this Christian colony might still be existing, shut in by a wall of ice from the rest of the world, and retaining still the religion, manners, and language of their forefathers of the fourteenth century. Some navigators even, who at various periods attempted to approach the coast, imagined they had seen across the ice, houses and steeples, had heard church bells ringing, and had perceived flocks pasturing on the hills. It was a fine foundation for imagination to build upon, because there was recorded undeniable truth for a foundation. It was a fact resting upon historical documents, that, in the year 983, one Gunbiorn had been driven by a storm to the west of Iceland, and had discovered land. It was equally beyond doubt that one Eric Raude, or the Red, who was under sentence of banishment from Iceland, went to settle in this new country, and that fourteen years after he had settled there, his son Leif went to Norway, adopted Christianity while he was at the court of King Olaf Trygvesson, and returned with a priest to Greenland. Leif's grandson, Sokke, assembled the colonists at a town, or farm, called Brattalid, represented to them that they required a bishop for the honour of the colony, and for the sake of religion; and a learned priest, called Arnold, was selected and consecrated bishop of Greenland, in the year 1121, by the Archbishop of Lund in Scania. The bishops were at first suffragans of the Archbishop of Lund, and afterwards of Dronthiem, when that See was made an archbishopric; and seventeen bishops of Greenland are known by name, including the last Endrid Andreasson, consecrated in 1406. There is proof of a marriage-contract prepared by him and executed at Gardar, the town and episcopal seat in Greenland, three years after his consecration; but from about this date all communication with this colony appears to have ceased. Pontanus, in his history of Denmark, supposes that the extraordinary pestilence in the northern parts of the world, called the Black Death, which appeared about the year 1349, may have extended to Greenland, and have swept off the colonists. Traditions are still current

in Scotland and Norway, of whole districts, once cultivated and inhabited, having been entirely depopulated by this epidemic disorder—the most remarkable and fatal known in tradition or history. Pontanus, also, ascribes it to a prohibition of Queen Margaret, about the year 1389, to trade with Iceland, the Færo Isles, and other northern countries, without a license from government. Her successor, Eric of Pomerania, and his successor, Christopher of Bavaria, were engaged in the internal commotions in Sweden, and in the wars with the Hanseatic League; and Christian the First was occupied with Swedish affairs, and the conquest of Ditmarsh in Holstein. His son John was occupied in the same way; and it was not until the time of his son, the Second Christian, that the Archbishop of Dronthiem, Walchendorf, recollected that one of his bishoprics was missing, and had not been seen for the last 150 years. Walchendorf was raised to the Archbishopric of Dronthiem in the time of King John, in the year 1512; but, in consequence of disputes with Christian the Second, he left his See, to carry his complaints to Rome, where he died in 1521. He attempted to re-discover Greenland, and appears to have fitted out a vessel for the purpose, but could not obtain King Christian's permission to send her out on the expedition. The sailing instructions, however, which he had prepared are extant, and the accounts he had collected from traditions, of the course to be steered. Christian III. repealed the edict against a free trade with Greenland, but it was not until Frederic the Second's time, in 1578, that any attempt was made to re-discover the lost colony. It appears that, in 1433, some account of this Christian colony must have reached Rome, for Pope Eugene IV. appointed one Bartholomy to be Bishop of Greenland. It does not appear, however, that he ever reached the country. The last bishop known to have officiated there was Andreas, or Endrid Andreasson, appointed in 1406, and of whom a document, executed in Greenland in 1409, is said to have been discovered. A letter, also, of Pope Nicolas V. to the Bishops of Skalholt and Holum, in Iceland, of 1448, is said to be extant in the Vatican; and the letter refers to a communication from the people in Greenland, saying that they had been attacked and dispersed by an army of the natives, but had again assembled, and restored their churches, and praying for a bishop; and the Bishops of Skalholt and Holum are required, in this brief of the Pope, to send them a suitable priest. This was nearly a century before Walchendorf's time. What is known of the state of this colony in the 14th century—at the end of which, or about the year 1406, all direct knowledge of it ceased—rests upon manuscripts of Icelandic Saga, committed to writing in the 14th

century, and therefore entitled to some credit as documentary evidence. It appears from Walchendorf, Torfœus, and others, that, according to these ancient authorities, the colony was divided into the Eastern Settlement and the Western Settlement, with a large uninhabitable tract of desert mountain-land between them. In the Austrbygda, or Eastern Settlement, was the Episcopal seat and town of Gardar, twelve parish churches, and two monasteries. The number of inhabited places, or farms, was 190. The Vestbygda, or Western Settlement, contained four parish churches, and 110 farms, or inhabited places. The names of the parishes, the endowments of land, hunting and fishing grounds, belonging to the cathedral, to the monasteries, and to individuals, and other statistical particulars and local circumstances of fiords, islands, and distances in time required to row from one place to another, are related, and no attempt to create wonder, no wish to exaggerate or diminish reality, appears in the accounts drawn from these sources. We may impose upon ourselves by imagining more under the names of a cathedral, an Episcopal seat, a town, a farm, than the reality, in such a country and climate, admits of; but the error is in us and in our ideas, not in those who describe. It cannot be doubted—as the vestiges and remains of buildings in the country confirm the contemporary documents—that the Icelanders had, in the 10th century, established a colony somewhere in Greenland, and that it had attained to such a population and importance as to have churches and a succession of bishops, of whom seventeen are known, from the year 1121 to the year 1406.

This old colony was universally considered to have been situated on the east coast of Greenland, opposite to the mother country Iceland. In the course of the 17th century, between the years 1605 and 1670, seven or eight expeditions were fitted out by the Danish Government for its re-discovery; but none succeeded in approaching the land on that side of Greenland nearer than from three to fifteen miles, on account of a barrier of ice resting on the coast. The attempt was at last abandoned as fruitless. In 1587, John Davis discovered Davis' Straits within Cape Farewell, but none looked for the ancient colony in that quarter; and the story of its former existence was forgotten, or considered to be an idle traditionary fable. It appears now, however, that Davis had only made a re-discovery, and that, 600 years before his time, the Icelanders had not only entered Davis' Straits, but had colonized its western coast; and, from an inscription found in 1824 on an island near the entrance of Lancaster Sound—and which is preserved in the museum of Copenhagen—it appears that those old navigators had penetrated

far to the north on this coast, and that Parry, and other modern voyagers, had been only following the steps of the Northmen in those seas.

In 1718, Hans Egede, the father of all Protestant missionary enterprizes, who was then minister of the parish of Vagen in the island of Gimso in Norway, felt himself called to labour for the conversion of the heathen Esquimaux on the coast of Davis' Straits. He resigned his living, and was for eight years soliciting permission from Government, which in 1721 was granted, to proceed from Bergen as a missionary to the west coast of Greenland. He landed at an island which he called Hope, and established a colony which he called Good Hope. He soon acquired the confidence of the harmless natives; but neither he nor the Danish Government appear to have suspected at the time that they had formed their settlement in the country formerly occupied by the old colony. The natives had no tradition among them of its former existence, or their traditions were not attended to; and the impression was general that the old colony had been situated altogether on the other side of Cape Farewell, on the inaccessible east coast of Greenland, not within Davis' Straits on the west coast. In 1723, Egede set out on an expedition to the east coast with two aloops to discover the lost colony, but he only got down the Straits to an island called Sermesok, in latitude 60. 20, where his provisions failed. On this expedition, however, he discovered—at a place called Kakortok by the natives, between the latitude 60 and 61 N.—a remarkable ruin, the remains of a stone building of the old colonists. Many similar remains of former habitations were discovered afterwards in the same district, now called Juliana's Hope, and these were all considered to belong to what was called the Western Settlement of the old colony; but its far more important Eastern Settlement was still considered to have been round Cape Farewell, and along the eastern coast of Greenland. Hans Egede remained for fourteen years at his missionary station, and then left it in charge of his son Paul Egede, and returned to Copenhagen to promote the commercial and missionary affairs of his colony. It consists at present of thirteen settlements, fifteen smaller mercantile establishments, and ten missionary stations, of which four belong to the Moravian missionaries. The whole population connected with them is reckoned to consist of about 6000 souls, of whom 150 are Europeans, and five or six vessels yearly trade with them. Two expeditions were undertaken after Hans Egede's time for the discovery of the Eastern Settlement—one in 1752 by Petee Olson Valloes, in a Greenland skin boat, or women's boat. He went along the coast southwards, and visited the fiords in the district now called Juliana's Hope,

which at that time was not settled by Europeans, and, after wintering at Aglutsok Fiord, he proceeded next summer, doubled Cape Farewell, and was the first European who set foot on the south end of the east coast of Greenland. But as his provisions failed, he only reached the latitude of 60. 28. on that side, consequently not so high as the supposed beginning of the ancient Eastern Settlement. In 1786-7, another expedition was undertaken by Paul Egide and Rothes to the east coast, but, on account of ice, they could not get nearer to land than from two and a-half to three leagues. The attempt to approach the land appears to have been abandoned as hopeless, until Captain Scoresby, in 1822, showed by his voyage, that, in much higher latitudes—viz., between 70. and 75. north, the coast was not altogether unapproachable. He landed at several points, determined their geographical position, gave an outline of the coast, with many points well fixed, and, in reality, effected more for geographical science in a few days of leisure from his main object on a whale fishing expedition, than the Danish Government had done in 400 years. The more immediate and necessary business of his mercantile adventure in the whale fishing prevented this able navigator from exploring the coast to a lower latitude than 69° N., which is farther north than the old eastern settlement of the Icelandic colony was supposed to have extended. But he met with no obstruction from ice, and saw no impediment which, in his judgment—and Scoresby is certainly the most experienced navigator who has visited those seas—would have prevented him from running down the coast on this occasion to Cape Farewell, if his business had allowed him to attempt it.

This published opinion of Captain Scoresby was, in fact, a challenge and a reproach to the Danish Government in the eyes of the scientific world. Here was a Whitby captain exploring and laying down their own coasts for them in his merchant vessel, and doing in a week or two what they had been talking of doing for two hundred years. This appears to have been the stimulus which roused the Danish Government to the extraordinary exertion of sending out a very able naval officer, of perseverance, intelligence, and spirit, not exceeded by the most enterprising officers of any country—and giving him no adequate equipment, nothing suitable for such an undertaking—no crew, no second officer, no accompaniment of any kind but one Danish sailor to act as his cook, if Captain Graah chose to take a cook where no stock of food was provided for him. He appears even to have had no command over the functionaries or agents of the colony, to insure a supply of provisions being forwarded to his wintering station, or to meet him on his return. He was at their

mercy, or dependent on their convenience, in their mercantile arrangements, for the means of subsistence. The Danish Government appears to have tried to do as much as possible for science at the least possible expense; and it is wonderful that this excellent officer accomplished so much with such a total destitution of suitable means. His Government did little more than put him on shore in Greenland to explore the coast, with his great coat on his back, his sextant and chronometer in his pocket, and a sheet of instructions. No necessary articles, no comforts, no medicines were provided at first, much less sent out to meet the exhausted traveller. Here were no portable soups, concentrated essences of meat, canisters of preserved viands; none of the ingenious devices for affording nutritious and wholesome food in small bulk, with which even our merchant vessels on long voyages are provided. He was literally sent alone on a voyage of discovery in Greenland, without any provisions to fall back upon, or carry with him.

Captain Graah sailed from Copenhagen the 31st of March 1828, a passenger in a brig belonging to the Greenland Trading Company. He gives a suggestion on this voyage which would well deserve the consideration of our philanthropic societies which occupy themselves with the means of preventing disasters at sea—viz., that a simple code of signals should be adopted, by common consent of all nations, for communicating the latitude and longitude between vessels meeting at sea. He mentions falling in with an American brig laying to, which hailed his vessel, to inquire the latitude and longitude; and he was doubtful whether the answer could have been heard. With very little trouble, our Government might establish some simple signals for conveying the information which is always welcome to merchant vessels at sea, and which would be soon adopted by all nations, if our Customhouse required all our vessels to be provided with a printed code, and the necessary flags.

On the 27th April they made Cape Desolation, and came to anchor at Frederic's Hope, in latitude 62 longitude 50 west of Greenwich. This is the principal settlement of the Danish colony in Davis' Straits. The vessel appears not to have been fortified, like a whaler, against the shock of ice; and, therefore, had to keep clear of the coast, which is always encircled with ice about Cape Farewell and the entrance of the Straits in latitude 59°. Captain Graah left Frederic's Hope on the 5th of June in a Greenland boat, and proceeded along the coast, southwards, to Juliana's Hope; the settlement nearest to Cape Farewell, in latitude 60. 42. 54, and longitude 46. 0. 44. From this place he was to fit out his expedition of discovery round Cape Farewell. The passage is inside of innumerable islands and ice

fields. The highest mountains on this west coast of Greenland were found to be from 4300 to 4500 feet high. They are supposed to contain tin, and lead ore, and the mineral called Kryolith is used by the natives, when it is ground to powder, to mix with their snuff. Although glaciers in many places reach from the mountains down to the sea, the country is not uninhabitable. There is a little pasturage for cows, and even potatoes may in some seasons be cultivated with advantage. Here also a small fish, of the herring species, is found in great abundance, and is dried in the sun, and preserved for winter food by the natives. It is here, therefore, that the most populous of the two ancient settlements may, from natural circumstances, be looked for. The remains of houses and other marks of inhabitation discovered by Egide, and about the year 1777, by Arctander and Bruhn, and revisited by Captain Graah, are all in this district of Juliana's Hope. These remains consist of walls or foundations of houses, overgrown with dwarf willow, and crowberry, and blackberry heath, but still sufficiently entire to shew the original dimensions. The most considerable of these ancient ruins appears to be in Igaliko Fiord, about sixteen English miles from Juliana's Hope. It stands on a long and narrow stripe of land, on which there is little grass, but only moss, and heath, and which is hemmed in by rocks from which the stones of the structure have been taken. The stones are built with care, and in regular courses, but apparently without mortar. There are four windows in the south side towards the sea, and two doors. The principal entry has been in the west end, and opposite to it, in the east end, is a good arched window entire; and these two end walls are 16 and 18 feet high. The side walls are still standing from 7 to 13 feet high, and about four feet thick. The length of the building is 51 feet, and the breadth 25. The arched window is five feet four inches high, and four feet four inches wide, and it and the other windows and niches are high in the walls, not near the level of the floor. The building has evidently been intended for a church, not a dwelling-house. Captain Graah had the whole interior dug up, but nothing was discovered—not even a pavement, or floor—from which, he conjectures, that this church had never been finished, and that it may be the one alluded to in Pope Nicolas V.'s brief of 1448, as being restored. But we find old chapels and parish churches in the north of Scotland, which never had in Catholic times, and some which have not at the present day, any other flooring than the cottages of the country, viz., the natural soil beat by the feet. Besides this church, many other remains of buildings have been discovered and described by Arctander, Olsen, and others, who have explored this district since 1777, when it was first colonized. It is

pretty clearly established, as no similar remains have been discovered or heard of from the natives on the other side of Cape Farewell, viz., on the eastern coast of Greenland, that this district of Juliana's Hope has in reality been the Austrbygda of the old colony, and the Vestrbygda has been higher up the Straits, north of Frederic's Hope; and the two settlements have been divided from each other by the uninhabitable district between, in which the mountains and precipices are close to the sea, and the vast glaciers filling the valleys render it unfit for human inhabitation. This opinion is confirmed by the physical circumstances of the country described by Captain Graah, viz., that fish for food abound within the Straits on this west coast, and that hares and reindeer are numerous, and supply a considerable proportion of the subsistence of the inhabitants; but on the east coast the natives depend entirely on seals and whales, and the reindeer and hare are unknown. These animals appear never to have penetrated across the middle ridge of this vast peninsula, or to have found their food on the east side of it. The natural means of subsistence—fish and game—must at all times have determined the amount of population in any district of this country, and the old settlement, with its churches, monasteries, and 190 parishes or hamlets, or farms, or inhabited places, must have been where food was most attainable, which it evidently is on the west side of this peninsula, viz., within Davis' Straits, not on the east side. This, the antiquarian object of Captain Graah's voyage, appears to be placed beyond reasonable doubt. He discovered no ruins after passing Cape Farewell, and on coming to the east coast, the supposed site of the Austrbygda, he could hear of no remains known to the natives; and the country is in every respect less adapted for subsisting inhabitants by its natural products.

The Greenland boats are from 22 to 24 feet in length, and 5 or 6 feet broad, and 2 feet deep. They have the skeleton only of wood, viz., the keel, ribs, stem, and stern posts and seats, and these are made usually of the drift wood found about the shores. This skeleton, instead of being clothed with planks, is covered with seal skins without the hair, stretched, well greased, and sewed together. When dry, this covering is as elastic and tight as a drum head. No nails or iron fastenings are used. The boat is so light that a couple of men can carry it; and in case of a leak, that is, of a hole being cut in one of the skins, to which it is much exposed in the ice, a lump of grease is stuck in the fracture, the boat is hauled up on the ice, and a piece of skin sewed over the hole. These are called women's boats, because the sewing them, and also rowing them with short oars, used in the European way, are performed by women. A loaded boat, with four or five female rowers, will

make 35 or 40 English miles a day, but every fifth day it must be hauled up to let the skins dry. The Kayak is used only by men, and is the Esquimaux canoe known to us by specimens in our museums, with a deck and hole in it, in which the man sits laced in with a water-tight skin round his middle. It is 12 or 14 feet long, $1\frac{1}{2}$ feet broad, covered all over with stretched skin, and is so crank, from the top-weight of the man's body, that it requires great dexterity to avoid being overset, or to recover from such a disaster. The Greenlanders, however, use the Kayaks in searching for and attacking white bears, or seals, and brave the heaviest waves in these little buoyant swimming vessels.

The most southerly settlement, that is, the nearest to Cape Farewell, is Fredericsthal, and between it and Juliana's Hope, above 50 different remains of dwellings had been discovered by Arc-tander; and Captain Graah discovered or heard of many more. From their situation he concludes that the ancient colonists must have subsisted then as now, upon the natural products of the sea and land, fish and game—not by cattle, for which grass is rarely found near these ancient habitations. Fredericsthal is situated in latitude 60. 0. 10., and longitude 44. 37. west of Greenwich.

Captain Graah's description of one of the long narrow fiords which he discovered on a preliminary excursion from Fredericsthal, and called Prince Christian's Sound, is very striking:—

“The depth of water must be very considerable, for the land on both sides is very high, and the sides of the precipices so steep that it is rare to find so much room at their feet as to draw up a boat on it. No vegetation, of course, appears on these steep rocks, not so much as a stalk of grass, or even any kind of moss. All nature seemed as dead as the rocks. The sea birds, which had surrounded us outside in thousands, disappeared, as well as the seals and other sea animals, and a single raven, that came croaking over our heads towards evening, was all that we saw of living nature in this Sound. The solemn stillness that reigned over all around us, was only broken by the thunders of ice masses breaking off from the field of ice, or by the strong rustling of some tide ripple. Just before dark, we were so fortunate as to find one of those shelves on which we could draw up our boat out of the water, and we had scarcely done so before a storm came on from the north.”

Captain Graah passed the first winter at Nennortalik, an island inside of the group of which Cape Farewell itself is one. The winter was comparatively mild. The cold was seldom more than 13 or 14 degrees below the freezing point, while in Europe, during the same winter, it was from 20 to 30 degrees. The severe winters in Europe, it is observed by Captain Graah, are generally mild in Greenland, and *vice versa*; and, although in the most northerly

settlements in the Disco Gulf, at Omenak and Uppernavik, the thermometer will sometimes be 30 degrees under the zero of Réaumur, and the rocks are riven asunder, and even in-doors the blankets will be stiff and covered with hoar-frost in the morning, and frozen to the pillow; yet, to the feelings, he observes, the cold is not so intolerable, if there be no wind, as it often is in Copenhagen with the thermometer at 16 degrees.

On the 21st of March, Captain Graah set out on his voyage of discovery, with four Danes, five Greenland men, and ten Greenland women as rowers, and accompanied by a transport-boat with goods and provisions, and several fishermen in their kayaks. They went inside of the islands on which the capes called Cape Farewell and Statenhuk are situated, and through Prince Christian's Sound, at the mouth of which they were detained 25 days, on an island called Kikkertak, by storm and ice. Sending back his transport-boat, and superfluous hands, Captain Graah proceeded northwards along this coast, between the ice and the land, on the 26th of April; but was again detained for more than three weeks by the ice at a peninsula, called Nenneet-suk, in latitude 60. 28. On the 23d of June, the expedition had reached the latitude of 61. 47., and here, from the want of provisions to subsist the two boats' crews, Captain Graah sent back the naturalist, M. Vahl, and the interpreter, M. Mathiesen, who declared the dialect of the natives they had met with was no longer intelligible to him, and proceeded alone with his guide and huntsman, Ernenck. Ernenck was in his kayak, and Captain Graah in a women's boat, rowed by Ernenck's wives and other women. On the 10th of July, Captain Graah reached Kemisok, an island in latitude 63. 36. 50. Here he found an assemblage of about 100 people, most of whom had never seen an European, but by trading with others who frequented the Danish settlements they were acquainted with European wares, such as snuff, beads, and other articles. They were hospitable—entertained the traveller with dried seal's flesh, bear's fat, and other delicacies, and he was able to purchase a supply of such food from them. They were a taller, handsomer race than the Esquimaux within Davis' Straits. They knew nothing of any remains of dwellings on the mainland, which, they said, was always covered with snow, and had no grass; and reindeer and hares were unknown to them. On a very little island, called Alnik, 130 people were living in their tents for the object of catching seals, bears, and fish. They supposed a reindeer's skin, of which one of Captain Graah's female rowers had a pelisse, to be the skin of a dog, which proves that the reindeer do not frequent this side of Greenland. On the 18th of August, after a constant

struggle to get forward through the small openings of clear water between the vast field of ocean-ice on one side, and the snow-clad land on the other—starving by day, and sleeping under tents by night on the shore of the barren islets, Captain Graah reached an island in latitude 65. 15. 36, which he called Dannebrog's Isle, and turned back to seek winter quarters. He had ascertained, that from Cape Farewell, in latitude 59, up to latitude 65, no inhabitable land and no remains of former habitations are known to the natives, and that the ancient colony cannot have been situated between these two points. But between latitude 65 and latitude 69, where Captain Scoresby had landed and found clear water for his ship, nothing is known; and of the coast from latitude 69 to 72, which Captain Scoresby had run along without obstruction, nothing is known but some points of land which he laid down. As Captain Graah took possession, with the usual formalities, of all the land, and called it "King Frederic the Seventh's Coast," the Danish Government should take the trouble of exploring and laying down geographically their new territories.

In October, Captain Graah reached Nukarbik in 63. 21. 38, where he passed the winter. Dried seal's flesh, often half rotten, and always in short supply, was the only food of the party. The sluttishness and dirt of the Esquimaux, which Captain Parry describes so racily in his voyage, entered here into the daily fare and unavoidable way of living. Hunger made the seal's fat and flesh, with all the filth of the natives, but too often welcome to this ill-provided voyager.

The whole population met with by Captain Graah, between Cape Farewell and Dannebrog's Isle, was, he reckons, about 600 persons; and they are diminishing, by numbers who go yearly to settle where subsistence is more abundant, about Fredericsthal. Among this people, hunger, it is reported, often leads to abandoning the aged, and even to devouring each other—but this appears not well ascertained. Captain Graah praises highly the honesty, hospitality, and, according to their own ideas, the good manners, and politeness of these heathens. They have no religion, no prayers, sacrifices, or other religious observances; but they have a notion of higher unembodied beings, and ascribe a spirit or power to fire, water, air, the ocean, &c.

In the following April of 1830, Captain Graah once more endeavoured to penetrate to the north. But at the end of July the party were on a bare rock, shut in by ice, in latitude 64. 9. Food became scarce, even to starvation. Seals, birds, mussels, seaweed, could not be found, or were consumed. Old seal skins were the only food of the party. For five days and nights some small pieces of whale blubber, which they found in the sea, was

their only sustenance: and they must have perished, if Ernenck's son had not caught a small seal, which was instantly devoured raw, hide and hair, for they had been reduced for two days to ice and snow. Soon after, they killed a large seal, on which they lived until they reached Queen Maria's Valley, where four or five families were busy with the salmon-fishing. The health of this brave officer gave way at last under the accumulation of hardships, and of bad food, which consisted of stinking seal's flesh dried in the sun the year before, and he became seriously ill. He ascribes his convalescence to finding a place abounding in blaeberries and crowberries which, for nearly six weeks, were the principal food of the party. The Danish Government appears to have provided no medicines for them. No boat with provisions had been sent out to meet this forlorn crew, according to the orders left at Juliana's Hope. Twice they were shipwrecked, and were nearly left on a bare rock without their boat, for all were too ill to make any exertion to save it. At last on the 8th of October, when winter was already set in, they reached Prince Christian's Sound, and the only two men who were able to move were despatched to Fredericsthal, and some bread and wine were sent to them. Thus ended an expedition, as disgraceful to the Danish Government—for fitting out so badly, and abandoning so entirely, the officer sent out—as it is honourable to the skill, perseverance, and high sense of duty of the brave officer who accomplished so much with such want of means and of support. In September 1831, Captain Graah, after completing the survey of the districts of Juliana's Hope and Frederic's Hope, returned to Copenhagen.

One circumstance in the course of Captain Graah's narrative appears to us not sufficiently explained. In Averket Fiord near to Taterat, about latitude 61, Captain Graah heard of a large piece of iron, and hired a boat and went in search of it. It proved to be a small ship-gun; and a woman, supposed to be about forty years of age, said that in her childhood she had heard of it being there. But how could a ship's gun get up one of these fiords, if the coast is beset perpetually, as Captain Graah supposes, with an impenetrable field of ice stretching so far out into the ocean that ships cannot approach so near to the coast as even to be seen from it? A ship may, no doubt, have been wrecked upon the outside ice, but then the mass of ice on which the piece of the wreck with this gun on it was deposited, must have found open water to float up this fiord, and to be finally deposited on the beach. It is not told us by Captain Graah, how far within the mouth of the fiord, or how far above high water mark, this ship-gun was found. The natives, if they even had the means,

could have had no object for dragging over the ice, and up the beach, such a mass of iron which they could not reduce, or apply to any of their uses. Its locality, if minutely described, would have afforded a guess at the possibility of shipwrecked mariners, as well as a ship-gun, having at some period reached the land, and having mingled with the native race in a region from which they had no escape. This conjecture acquires some degree of probability from, or at least would account for, a circumstance observed by Captain Graah, that the inhabitants of this fiord, in particular, are of a different appearance from the ordinary Esquimaux race, "some of them having brown hair, and complexions so fair that the red tint of their cheeks was discernible; and in person they are taller than the other Esquimaux." The opinion, at any rate, that the east coast of Greenland in this latitude is at all seasons inaccessible to ships on account of an immovable barrier of ice, must give way before the simple fact of a ship's gun being found on the shore of one of the fiords. No theory, or opinion founded on the state of the ice on the coast in one season, can overturn this simple corroboration of Captain Scoresby's opinion, founded on his personal experience and observation, that the coast is at times open. In the narrow sea between Iceland and the coast of Greenland, at Captain Graah's farthest advance, latitude 65. 18., it is probable that fields of ice may accumulate, and press upon the land for long periods; but that this is a permanent junction of Iceland to the continent—while much narrower straits, in much higher latitudes, are only occasionally, not permanently, blocked up—appears improbable. The coast between latitude 69 N. and latitude 73 N., which Captain Scoresby found accessible in 1822, deserves investigation as much as the west side of this vast mass of land. The great inlets between Traill isle and Smith isle, about latitude 72, called Davy's Sound by Captain Scoresby, and that between Cape Brewster and Cape Tobin, about latitude 70, called Scoresby's Sound, may lead to valuable fishing waters. Whale oil, whale bone, seal skins, are almost the only products hitherto sought for from those polar regions; but in so vast a portion of the earth, the ores of copper, lead, and other valuable metals, may probably be found in situations accessible to modern enterprise. Plumbago is already an object of speculation from those countries, a vessel having been sent this year to the usual whale or seal fishing, with orders to complete the lading, if necessary, with that mineral; and since this article was in type, we observe the arrival at Leith of a vessel, the *Eagle*, with 100 tons of black lead, from Operininck, in latitude 72. 45., within Davis' Straits, where the vessel had been on a whale-fishing voyage. Guano is also a product searched

for in those latitudes at present, but probably the search will be without success. The sea birds may be as numerous in the north as on the coasts producing guano, but their habits, regulated by natural circumstances, are different. In the low latitudes between or near the tropics, the night is always about the same length, and with little twilight, and so dark that sea birds cannot discern their prey in the waters. They return to roost all the year round at sunset, on their native islet, which in time becomes covered with a bed of their excrements thirty or forty feet thick. In the higher latitudes the length of night is variable, and no such habit is formed. The six weeks of their breeding season, is the only period of the year they are forced by any natural circumstance to return to the same rock. By night, as well as by day, they can see to follow their food every where in summer, and to avoid their enemies; and in winter they are forced to migrate by the inclemency of the weather, and to change their habitations and haunts altogether. No such depots, therefore, of guano, similar to those in the tropical countries, can be expected in the high latitudes.

From Captain Graah's narrative, we learn a circumstance, not specially noticed by Captain Graah himself, of great importance in missionary enterprize. We find that the total population in this vast extent of country is estimated at about 6000 individuals, of whom about 150 persons are Europeans. We learn, also, that there are ten missionary stations, of which six belong to the Danish Lutheran Church, and four to the Moravians, Herrnhuters, or United Brethren. There is consequently one missionary, at least, to every six hundred of the population, and some of these stations have been established for about a hundred and twenty years. We learn, also, that the natives, for the sake of subsistence, are found congregated in groups of from 20 or 30 to 130 persons, at particular fishing stations on the coast, and that they are a remarkably docile, harmless race, without any fixed form of idolatry or superstition, and opposing no peculiar obstacle, but gross ignorance, to the labours of the Christian missionary. It is with astonishment, therefore, that we gather from Captain Graah's narrative that a very large proportion of this small native population is still heathen. He reckons the number of natives he fell in with between Cape Farewell and Dannebrog's Isle, the most northerly point of his expedition, at 600 individuals, or about one-tenth of the whole population of the country, who had never heard the name of Christ. Of these, the nearest were within ten days' journey of the missionary station of Fredericsthal, and all were in direct or indirect intercourse with the missionary and trading stations,—

were acquainted, and supplied, with snuff, beads, and other European articles, but not with the gospel. Captain Graah's guide, Ernenck, and the son and wives of Ernenck, were occasionally living in the immediate neighbourhood of the missionary station, and were all heathen. Captain Graah's interpreter and companion in part of his journey was the commercial agent, Mathiesen—not, as we might naturally expect, a Christian missionary, master of the language of the natives, and eager to seize the opportunity of mingling with the distant heathen—not a native, sufficiently instructed by the missionaries in the Danish language to accompany Captain Graah as interpreter. We are unwilling to doubt the zeal and faithfulness in their vocation of the Christian missionaries who have been sent forth to this corner of the heathen world, in such numbers in proportion to its population. The two Egides, Cranz, De Vries, and others who have laboured here, were unquestionably men of true missionary zeal, and devoted to their calling. The voluntary renunciation of all the comforts of civilized life, implied in living in even the best provided of the Danish settlements on this coast, is a pledge of the sincerity of purpose, at their outset in this missionary field, of the missionaries who from time to time leave Europe to devote themselves to their vocation here. What, then, can be the cause of such small and unsatisfactory results from a century of missionary labour in Greenland? We gather from incidental observations in Captain Graah's narrative, the true cause, and it is instructive to all who take an interest in the success of missionary undertakings. The missionary and his business are under, and secondary to, or connected with, the Government functionary and his business, and the mercantile agent and his business. The natives must gather oil and skins to trade with—must load and discharge vessels, transport goods, and do other work for the Government, or for the Greenland Company, which has a monopoly of the trade of the country from the Danish Government, and cannot be spared, at the proper season for travelling, to convey the missionary to where his business calls him, nor spared to be instructed, or to instruct, in the Christian religion. It was with difficulty that Captain Graah, although furnished with letters to the functionaries and head agents at the different stations, and employed in the Government service, could obtain the people, stores, and assistance necessary for his expedition. The dependence of the missionaries upon the civil power, and their subordination to it, have deadened Christian zeal and effort, even in this small sphere of action, and the missionary has shrunk into the salaried and subordinate officer of Government, content to do what the state

functionary or mercantile agent allows him the means to do, and not attempting to do more. The mixing also of mercantile pursuits, of trade or manufacture, or worldly gain, with the calling of a missionary—which is the principle acted upon in the missions of the Moravians, or United Brethren, both here and in the West Indies—is of deteriorating effect on the character and influence of the missionary. A merchant-missionary, a planter-missionary, is not in the true position of a teacher of the Christian religion to customers who must sell their fish and buy their goods at his shop, or to slaves who must work on his plantation. It is impossible to combine the Gospel and gain in the mind even of the Esquimaux. If he think the gain made out of his labour exorbitant, he will reject the doctrine as an imposition also, taught to him for the sake of the gain. The small success of these trading missions of the Danish Government, and of the United Brethren, during a century that they have been established, can only be ascribed to these causes. The people whom they have to convert are neither numerous nor savage, nor addicted to any exclusive form of idolatry. If they are not Christians, the fault is not in them, but in their teachers.

The progress made by Captain Graah in navigating along the coast between a barrier of ocean-ice and the shore, for upwards of five degrees of latitude, in a boat covered with skin, rowed by women, and incapable of sustaining the slightest shock, or of forcing a passage through the smallest obstruction from ice, is encouraging to the hopes that the *Erebus* and *Terror*, in navigating along a coast through similar impediments, may accomplish the grand object of running between the barrier of ocean-ice and the American shore, and of reaching Behring's Straits and the Pacific Ocean.

ART. IV.—*Memoirs of William Smith, LL.D., Author of the “Map of the Strata of England and Wales.”* By his Nephew and Pupil JOHN PHILLIPS, F.R.S., F.G.S., Professor of Geology and Mineralogy in the University of Dublin. London, 1844.

THE year 1769 gave birth, in France and in England, to two men destined to exercise an important influence on the infant science of Geology, if they may not be considered its founders; for all previous inquiries respecting the structure of the earth consisted of pure assumption, or were largely mixed with it. These were George Cuvier and William Smith—both original discoverers—both men of genius—though possessing minds of different orders, and differing widely in the amount of cultivation bestowed upon them. In Cuvier we behold the accomplished scholar, the profound naturalist and philosopher, one of the brightest stars in the galaxy which adorned the French Institute, the reformer of the established classification of nature, the founder of the new science of Palæontology; we behold, also, the enlightened statesman, called, for his administrative talents, by Napoleon, to the office of counsellor of State, and continued in the same honourable station by the Bourbons of the Restoration and the Dynasty of the Second Revolution.

In William Smith we see the plain English yeoman, the self-educated land-surveyor, born in a district rich in fossil remains, and led by this circumstance, and by the profession to which he applied himself, to convert the playthings of his childhood into the studies of his riper years, till they conducted him, while using the most homely and unscientific nomenclature, to the important generalizations—that the English stratified rocks have a regular and invariable order of succession—that they may be identified, under doubtful circumstances, by their organic contents,—and that each had been, in succession, and for a long time, the bed of the sea.

The researches of Cuvier were prosecuted amidst ease and affluence, the sunshine of Court favour, and the applause of associated philosophers; those of Smith were carried on amidst the duties of a laborious profession, which he had formed in a great measure for himself, and in which he might have acquired affluence, could he have explored, with less eagerness, the career of discovery in which he had embarked, and which, like poetry with Goldsmith—

“ Found him poor at first, and kept him so.”

He laboured alone and neglected, through a large portion of his career, with but little private support, destitute of public patronage, without the countenance of scientific associations, and keeping aloof from them, until he had achieved the great work on which D'Aubisson pronounced this eulogium :—

“ Ce que les minéralogistes les plus distingués, ont fait dans une petite partie d'Allemagne, en un demi siècle, un seul homme (M. William Smith ingénieur des mines,) l'a entrepris et effectué pour toute l'Angleterre, et son travail, aussi beau par son résultat qu'il est étonnant par son étendue, a fait conclure *que l'Angleterre est régulièrement divisée en couches, que l'ordre de leur superposition n'est jamais interverti; et que ce sont exactement des fossiles semblables qu'on trouve dans toutes les parties de la même couche, et à des grandes distances.*

“ Tout en payant au travail de M. Smith, le tribut de l'admiration qui lui est dû, il me sera permi de désirer, que des observations ultérieures en confirment l'exactitude, et déjà, sur plusieurs points, les travaux de minéralogistes Anglais l'ont confirmée.”

He whose labours received this first honourable acknowledgment at the hands of foreigners, and who, in his own country, was called—in the first instance almost in derision—“ Strata Smith,” was hailed, in his latter days, by the Geological Society of London, as the father of English geology, was presented by them with the first Wollaston medal, struck to reward original discoverers, was honoured, by the University of Dublin, with the somewhat incongruous title of Doctor of Laws, and rewarded with a pension by the Government, at the request of the British Association.

Between the heads of the French and English schools of geology—the former taking the tertiary, the latter the secondary strata for the subject of its researches—there were other points of resemblance and of contrast. The decline of life was clouded with affliction to both of them. Cuvier suffered from the loss of children; Smith from pecuniary difficulties. The frame of Cuvier reeled beneath the blow; adversity dashed its billows against Smith as against a rock—his fortitude and patience, his buoyancy of spirit and his enthusiasm, never forsook him amidst the severest distresses.

The ancestors of William Smith, we are told by his nephew and biographer, were a race of farmers, who, for many generations, owned small tracts of land in Oxfordshire and Gloucestershire. His grandfather, “ William Smith of Sarsden, yeoman, eldest son and heir-apparent of William Smith, the elder yeoman of Churchill,” on his marriage in 1730, with “ Lucy, daughter of Henry Raleigh, yeoman of Prescott, in Oxfordshire,” received as a marriage portion, one hundred and ten pounds, in consideration of which his father settled upon the bride as a jointure,

"one half yardland and half a quarter of a yardland of arable meadow and pasture in Churchill Field." The lands thus described, when consolidated at the inclosure, amounted to nearly ten acres, which were sold, in 1809, for seven hundred pounds. It was the boast of the subject of these memoirs, that these Raleighs were an obscure or forgotten branch and descendants of Sir Walter Raleigh—an opinion for which his nephew has been able to find no support, and on which he very justly remarks, that "it is of very little consequence, in the history of Strata Smith, from what *gens* he sprung; his immediate ancestors, and all his connexions, were men in humble life: on the oolitic soils, which they had cultivated for ages, he was born and bred; on these he planted, in advance of all other men, the standard of geological discovery; to the study of these, his best days of active mind were devoted, and in these, according to a natural, if fanciful wish, his remains are laid to rest."

William Smith, the geologist, was the son of John Smith, the second son of the above marriage. At the age of eight years, he was deprived of his father, of whom all he has recorded is, that he was an ingenious mechanic, and died from the effects of a cold, caught whilst engaged in the erection of some machinery. His mother, whose memory he cherished with fond devotion, is described by him as a woman of ability, of a gentle and charitable disposition, and attentive to the education of her children.

"According to his own account, however," says Professor Phillips, "not only were the means of instruction at the village school very limited, but these were, in some degree, interfered with by his own wandering and musing habits. The rural games, in those 'merrie days' of England, might sometimes attract the wayward, and comparatively unrestrained scholar from his books, but he was more frequently learning of another mistress, and forming, for after life, habits of close and curious contemplation of Nature."

As there are many now who sigh for the revival of those saturnalia of the middle ages, which, despite the Puritans, long lingered in the more sequestered nooks of Protestant England, it may not be uninteresting to give a statement of the items of expenditure at one of these merry makings of Oxfordshire, known as Whitsun Ales, to which William Smith of Churchill was treasurer in the years 1720 and 21. The total receipts in 1721 were £58, 19s., the expenditure £54, 5s. 11d. The disbursements formally vouched being as follow:—

For Ribbands,	.	.	.	.	£11	19	0
Malt,	.	.	.	.	10	5	0
Cake,	.	.	.	.	5	5	0
Excise,	.	.	.	.	4	7	11
The Fool,	:	.	.	.	1	0	0

The Fiddler,	.	.	.	£0	10	6
The Morris,	.	.	.	0	6	0
The Lord,	.	.	.	0	2	6
The Lady,	.	.	.	0	2	6
The Lord and Lady gave the Fool,	.	.	.	0	1	6
The Bells,	.	.	.	0	1	6

The lord's man and the lady's man and five maids received nothing.

After his father's death, and his mother's second marriage, his father's eldest brother, William, who died unmarried, and to a portion of whose property he was heir, became young William's protector.

"From this kinsman," says his biographer, "who was but little pleased with his nephew's love of collecting the pundibs and poundstones, or quoit-stones, and had no sympathy with his fancies for carving sun-dials on the soft brown oven-stone of the neighbourhood; he, with great difficulty, wrung by repeated entreaties money for the purchase of a few books to instruct a boy in the rudiments of geometry and surveying. But the practical farmer was more satisfied when the youth manifested an interest in the processes of draining and improving land; and there can be no doubt that young William profited, in after life, by the experience, if it may be so called, which he gathered in his boyhood, while accompanying his relation ('old William') over his lands at Over Norton."

The pundibs and poundstones, here spoken of, were fossils of the oolites, the former *tenebatula*, the latter a large *echinite*, often used by the dairywomen as a poundweight.

With a memory so retentive that whatever he saw he remembered for ever, and was able, to the close of his life, to recall every event of his boyhood, William Smith prosecuted his studies from 1783 to 1786, irregularly, and without assistance, but with ardour and success; began to draw, attempted to colour, and made some progress in those branches of the mathematics, then deemed sufficient for surveyors and engineers, and became, at the age of eighteen, assistant to Mr. Edward Webb, a land-surveyor of Stow-on-the-Wold, who had undertaken the survey of the parish of Churchill, for the purpose of inclosure. The master, like his pupil, was self-taught, deficient in literary acquirements, but skilled in mechanics, mensuration, logarithms, algebra, and fluxions. His practice combined much, such as the determination of the force of water, and the planning of machinery, which is now regarded as the province of the engineer.

From 1788 he was actively engaged in the ordinary business of a land-surveyor, in the course of which he traversed the oolites of Oxfordshire and Gloucestershire, and the lias and red marls of Worcestershire—visited the Salperton Tunnel, on the

Thames and Severn Canal—examined a boring for coal in the New Forest, opposite the Shoe Alehouse at Platford,—noting, and comparing, and treasuring up for future combination, the variations of the soil, and their connexion with the general aspect and character of the country, and with its agricultural and commercial relations.

In 1791, we find him walking by Burford, Cirencester, Tetbury, Bath, Radstock, Old Down, and Stoneaston, to Stowey, where Webb had made over to him the conduct of a survey. There he observed with surprise red marl similar to that of Worcestershire, holding the same position with regard to the lias and superincumbent rocks. He had previously observed, in the collieries of High Littleton, where he had been employed to make a subterranean survey, some regularity in the strata sunk through in the pits, though the colliers would not allow any regularity in the hills of superincumbent “red earth;” “but on this subject,” says Smith, “I began to think for myself.”

The repeated surveys which he made of these collieries, in the years 1792-3, suggested to him the idea of a model of the strata in a coal country, formed of the materials of which they are composed, reduced to scale, and placed in the order in which they occur.

Some of the neighbouring gentry, admiring the ability and perseverance manifested by Smith, in his employment at the High Littleton Collieries, interested themselves in the advancement of his professional career, for which the occasion was highly favourable. Canals were then as much the order of the day as railroads are now; and he seized the opportunity to procure instruments, extend his reading, and to qualify himself to practise successfully as a canal engineer.

“This,” says his biographer, “was a tide in his affairs, which, had he followed the middle current, without stopping to examine the banks, would have led him on to fortune; and even under the great disadvantage of being subject to a strong deflecting force, his career was not unprosperous, and he joined with tolerable compactness the decisions of the engineer to the inquiries of the geologist.”

In 1793 he was engaged in executing surveys and levellings for a canal, in the course of which an opportunity presented itself of testing the correctness of a speculation which had occurred to him, as a general law affecting the strata of the district. This was, that the strata above the coal were not horizontal, but all inclined in one direction towards the east, so as to terminate successively on the west, and to resemble, according to his own homely but forcible comparison, the position of the slices in a plate of bread and butter. This supposition he found confirmed,

by his levellings in two parallel valleys; in each of which the "red ground" (new red marl), the "lias," and "freestone" (oolite) sunk eastward below the level, and were succeeded by a higher rock.

He was, however, aware of the unconformable position of the coal strata of Somersetshire, with respect to the "red earth" and superior beds;—he was also aware of the *faults* or fissures by which they are traversed, and the fact that the strata above the coal measures are not affected by these *faults*.* These general laws—deduced from local, and, in part, exceptional phenomena—occasioned him no little perplexity, till—the Canal Bill having passed in 1794—the committee deputed two of their members, with Mr. Smith, their engineer, to make inquiries and observations respecting the trade and management of other similar undertakings in England and Wales. Their tour occupied nearly two months, and extended over nine hundred miles—the deputation reaching Newcastle by one route, and returning to Bath by Shropshire. The expedition fully confirmed his preconceived views, and showed that a settled order of succession, continuity at the surface, and an eastern dip of the strata, were true on the large scale; and from his knowledge, acquired by long-continued observation of the physical features and characteristic vegetation of the different strata, he was able, during a rapid survey made from a post-chaise, to recognize, in passing from York to Newcastle, the hills of chalk and oolite on the east, distant from five to fifteen miles, by means of their contours, and their relative position with respect to the lias and red marl occasionally seen upon the road. On no other evidence than this, he laid down, with considerable approximation to accuracy, on his map of the strata of England and Wales in 1800, the prolongation of the chalk and oolite of Wilts and Somerset through Yorkshire. The tour is thus described by himself:—

"No journey purposely contrived could have better answered my purpose. To sit forward in the chaise was a favour readily granted;—my eager eyes were never idle for a moment, and post-haste travelling only put me on new resources. General views, under existing circumstances, were the best that could be taken; and the facility of knowing by contours, and other features, what might be the kind of stratification in the hills, is a proof of early advancement on the generalization of phenomena. In the more confined views, where the

* The meaning of the term *unconformable* may be explained by extending Smith's illustration, and supposing another series of slices placed horizontally over the lower inclined set. The *faults* may be also explained, by supposing the lower set of slices cut across with a knife before the upper set were laid over them, and the divided portions of the slices elevated or depressed with respect to the corresponding portions of that to which each originally belonged.

roads commonly climb to the summits—as in our start from Bath to Tetbury by Swanswick—the slow driving up steep hills afforded me distinct views of the nature of the rocks—rushy pastures on the slopes of hills, the rivulets, and kinds of trees, all aided in defining the intermediate clays—while occasionally walking, to see bridges, locks, and other works on the lines of canals, more particular observations could be made. Much, however well observed, but depending upon memory, would of course be lost—for this was all foreign to the purpose of our journey—and also another important inquiry on coal and collieries, for which we had each by agreement provided an extra memorandum-book.”

From Leeds—the northern limit of the collieries and canals—the party turned east to see York Minster, and the celebrated collieries of Newcastle. This gave Smith an opportunity, in crossing Tadcaster Moor, of seeing the magnesian limestone—a new rock to him, as it does not occur in the south. From the tower of York Minster he first descried chalk and oolite in the distant hills by the contour.

During six years Smith continued to be employed in setting out and superintending the works on the Somersetshire Coal Canal, in the execution of which he applied the knowledge he had acquired of the strata to the solution of such useful problems, as at what points to open quarries of good stone, where to choose the best foundations for bridges, how to intercept and conduct springs so as to economize the scanty supply of water for a line of canal running through a porous country. He had also valuable opportunities of extending his generalizations. Up to the present time he had gathered some vague notions respecting the distribution of organic remains in the strata. He had observed particular plants in the “cleft” above the coal, and particular shells in the lias and oolite; he had also observed their absence from the red marl; and from these facts he had been led to the conclusion, that “each stratum had been successively the bed of the sea, and contained the mineralized monuments of the races of organic beings then in existence.” The necessity now imposed upon him of obtaining a more accurate knowledge of the different sorts of rock, sand, and clay, to be cut through, led him to examine carefully the distribution of the fossils which he had been accustomed to collect. This convinced him that “each stratum contained organized fossils peculiar to itself, and might, in cases otherwise doubtful, be recognized and discriminated from others like it, but in a different part of the series, by examination of them. He had also noticed the difference between the sharply preserved specimens imbedded undisturbed in the original matrix, and the rounded condition of the organic remains, derived from a variety of strata, and confusedly blended

in the superficial deposits. He was now (1795) twenty-six years old. Up to this period he had resided in the village of High Littleton, but he now removed to Bath, where he occupied a house in Cottage Crescent, whence, he said, his eye ranged "over the interesting expanse which extended before me, to the sugar-loaf mountain in Monmouthshire, and embraced all in the vicinities of Bath and Bristol; then did a thousand thoughts occur to me respecting the geology of that and adjacent districts continually under my eye, which have never been reduced to writing. Hitherto he had published nothing, though his nephew assures us written evidence remains that, in 1796, he had begun to arrange his thoughts on paper for publication, and, in 1797, had drawn out a larger and general plan for the proposed work. This tardiness in communicating his discoveries arose, we may suppose, partly from want of leisure, produced by constant attention to the works of the Company in a variety of localities, attested by his copious notes and memoranda, all bearing the date and name of the place when and where they were written, partly from want of training in composition, and consequent distrust of his powers for the work. During the short intervals which he could snatch from his principal occupation on the works of the canal, he employed himself in reducing to practical application his theoretical knowledge of the structure of the earth, and the properties of alternating porous and retentive strata in the hills near Bath, in the adoption of a new process of draining.

It is not surprising that so close an observer of nature should be disinclined to the speculations so prevalent at that time, when geological inquiries consisted of little but hypothesis; and it appears, accordingly, by memoranda which he has left behind him, that whatever of this kind he met with in the course of his reading, was submitted to close scrutiny and comparison with the phenomena of stratification, which he had so carefully studied.

"Every man of prudence and observation," he says in one of his papers, "who has paid strict attention to mineralogy, the structure of the earth, and the changes it has undergone, will be very cautious how he sets about to invent a system which nature cannot conform to, without having recourse to volcanic eruptions or uncommon convulsions, by which every hill and dale must have been formed, and every rock must have been rent, to produce those chasms which, in comparison with the strata they are found in, are no more than sun-cracks in a clod of clay; yet such has been the language of ingenious men, who have set their theoretical worlds agoing, without either tooth or pinion of nature's mechanism belonging to them."

In these opinions there is much that is sound, mingled with the error of making his own discoveries, in a limited region, the

standard by which he condemned inductions, quite as firm as his own, drawn from data equally correct, as applied to other regions. He had generalized from observations, commencing among the oolites, in the centre of the secondary rocks, extended downwards to the base of the fossiliferous series, and upwards to such of the tertiary strata as are to be met with in Britain. In these, together with the loose covering of the earth, long called diluvium, all the phenomena of geology were, according to his views, comprised. By these his geological horizon was bounded; and, to the close of his life, he set his face against those higher generalizations of subsequent observers, whose observations, extending over wider regions, embraced the formation of metallic crystalline rocks and metallic veins, the changes of climate indicated by the different organic groups, the upheaval of continents, and the effects of subterranean fire in modifying the surface of the earth, in present and past times. He had seen the oolites, but he had never seen a volcano; and, at the Dublin meeting of the British Association, at which it was our fortune first to meet the cheerful and communicative old man, we were not a little startled at hearing the Father of English geology, and the newly made Doctor of Laws, most confidently assert, in the course of conversation, that "fire had nothing to do with a volcano." There can be no doubt that, with his habits and powers of observation, had he been placed in an extensive district of igneous rocks, he would have learned to interpret the phenomena presented by them, as truly as those of the aqueous deposits to which his studies had been confined.

Some memoranda, written in 1796, show that, at that time, his mind was again strongly occupied with the subject of organic remains. His notes at this period also advert to the local distribution of existing plants and animals upon the earth's surface, and their connexion with particular varieties of soil. When occupied, at a subsequent period, (1799), in compiling a history of his discoveries, he naturally turned his mind to the examination of what had been previously done by others. Plots' Oxfordshire, Morton's Northamptonshire, and Woodward's Catalogue of Fossils, were eagerly studied by him, and from them his principle of identifying strata by means of their fossil contents, enabled him to elicit much valuable matter which would have been lost upon others, and to extend his coloured sketches for a geological map of England. In the drawings of ammonites and echinites in these works, he recognized many well known forms belonging to the lias and oolites of his own district; and thus obtained, in the localities from which they had been procured, fixed points for those rocks in districts which he had never visited.

"The most prevalent notion," says Professor Phillips, "which Mr. Smith found in the works which he could then consult regarding the forms and localities of organic remains, was the vague and irrational belief, founded on a misconception of the language of Scripture, but handed down to these days as if to demonstrate the indestructibility of popular error, that these relics of more ancient systems of life were all buried in the solid strata by the operations of the general deluge. These views appear never to have influenced the mind of Mr. Smith, who, in his MSS. of this period (1797-98) not only denies this unsatisfactory hypothesis, but places, in direct opposition to it, his views, that it is the gravelly deposits scattered over the earth's surface, and containing *bones of quadrupeds, and rolled and transported rock masses holding fossils which had been previously imbedded and petrified*, which should be ascribed to diluvial action."

These opinions respecting the loose covering of the solid strata, to which Buckland, Cuvier, and other eminent geologists, subsequently gave currency and popularity, have been shown by the light of new discoveries to have been quite as erroneous as those which attributed the fossiliferous strata to the deluge. There is no evidence that this loose covering, which, though not universally, is very generally distributed, was formed, comparatively recent as it is, within the human epoch. On the contrary, there is strong presumption, in the present state of the evidence, that it is older than our race.

The mammalian bones usually referred to as characteristic of this deposit, belong to extinct species of existing genera, or existing species not now living in latitudes which they once inhabited. They occur, however, immediately *below*, rather than *in*, these deposits, being found in fluviotile and lacustrine beds of the most recent tertiary period, associated with molluscs, nearly the whole of which belong to existing species. Many of these deposits, up to that period in the life of Smith of which we are treating, and even to a much more recent date, were confounded with the so-called diluvium, from which they have since been separated. This last deposit differs, in many important points, from any member of the tertiary series, and from the modern deposits which succeeded it, and it appears to be the result of peculiar agencies, closing the ancient order of things indicated by the fossiliferous series, and ushering in that condition of the earth to which we, and our contemporary tribes of plants and animals, belong. An opinion, first advanced by Agassiz, is daily gaining ground among geologists, that these peculiar agencies consisted of glacial action partly marine—as appears by the marine shells which it contains, and which, in Britain at least, were distributed over submerged land—partly due to terrestrial glaciers which then occupied the valleys of our

mountain chains, in which the rocks are striated and polished beneath these deposits, in a manner not to be distinguished from the effects of existing glaciers on the rocks over which they pass. Although this deposit is the first which we encounter in our passage from the present to the past state of nature, it is that with which geologists are the least acquainted; and though the glacial theory of Agassiz is now drawing attention to it, it has hitherto received much less study than it deserves. Some geologists have too hastily assumed its phenomena to be corroborative of their preconceived views as to its origin; others seeing in them stumbling blocks to their doctrines—that no forces of greater intensity than those now concerned in the ordinary operations of nature are to be admitted into geological dynamics—appear little disposed to make themselves acquainted with those peculiar characters by which it is distinguished from the aqueous deposits of the present and former epochs, and prefer to dwell only on those which it possesses in common with them. A knowledge of its true history would solve some of the most interesting questions in the history of the earth. With our present knowledge of the most recent tertiary strata, we are better prepared than in the days of Smith to enter on the investigation; and we may hope that, by similar diligence bestowed on its examination, its origin will be worked out as satisfactorily as that of the stratified rocks. It has been recently compared to a leaf torn out of the records of the earth.* We would describe it rather as a leaf written in different characters from those which preceded and followed. There are strong temptations to connect it with that state of the earth described in the second verse of Genesis, which our translators have rendered by the terms, “without form and void,” if the signal failure of previous attempts to connect, first, the fossiliferous series, and, secondly, these superficial deposits with the deluge, had not given sufficient warning of the imprudence, in the present state of geological knowledge, of endeavouring to refer geological phenomena to events recorded in the Bible. All that can yet be affirmed of it with certainty, is, that it is extensively distributed over the temperate, as well as cold latitudes, of both hemispheres—that it appears to be absent from the equatorial regions—that no human remains or works of art have yet been found in or below it—and that, in Europe at least, whatever may be the case in America, none of the elephantoid mammals which inhabited that quarter of the globe in the period immediately preceding this deposit, have been found above it.

* *Edinburgh Review*, July 1845. Article, *Vestiges of the Natural History of Creation*.

But to return to the history of William Smith, and his progress in discovery.

In 1798 he purchased a small estate near Bath, beautifully situated in a deep and wooded valley, which he improved with much taste, and which the canal traversed without injuring its beauties. In this favourite retreat he spent many happy hours, though the erratic life which the business of the Canal Company compelled him to lead, prevented him from enjoying any long continuous residence on it.

The termination of his engagements with the Company, in 1799, formed a new era in his life, not only setting him at liberty for the prosecution of his geological inquiries, but imposing on him the necessity of applying the knowledge already acquired, in such a manner as should make known his system, and provide funds for travelling through England and Wales, to extend his examination of the strata, and test the accuracy of his earlier observations. In the accomplishment of this double object he was successful. He soon acquired an extensive practice as a mineral surveyor, and in draining land, yet still, his fame and the knowledge of his discoveries were diffused, not by any actual and authorized publication, but by the exhibition of his maps of the strata at agricultural meetings, and the circulation of manuscript copies of tabular views of the succession of strata, so far as he had ascertained it, and by discussions and explorations with a few friends.

The friends who most interested themselves in these inquiries were the Rev. Benjamin Richardson, then living at Bath, and the Rev. Joseph Townsend of Pewsey, author of "*Travels in Spain*." Richardson possessed an extensive collection of fossils, collected chiefly by himself. He was acquainted with the views then held on the subject of fossils, but had no knowledge of the laws of stratification, or of the connexion of organic remains with the order of superposition. Smith, on the other hand, though rich in this knowledge, knew nothing—as is evident from the local names he used for his fossils—of their relations to existing organized types. He had obtained an introduction to Richardson for the purpose of inspecting his collection, and the result has been well described, by Professor Phillips, as an electric attraction, between two minds thus reciprocally adjusted, "the fossils which the one possessed, were marshalled, by the other, in the order of the strata, until all found their appropriate places, and the cabinet became a true copy of nature."

Richardson could not but acknowledge that certain fossils had been found in the strata to which Smith assigned them, but was not prepared to admit his generalization, that an invariable order

existed among the strata, and that the same stratum was characterized by peculiar fossils at great distances.

To convince him on this point, Smith proposed some field excursions, in which the truth of his theory should be tested. Townsend accompanied them. One of the points visited was Dundry Hill. From its form, and its position with respect to the lias, Smith expected to find it capped by the lower oolite, and containing the same fossils as those contained in the same rock near Bath. To their astonishment, his companions found his predictions verified; and though far superior to him in general literature and knowledge of natural history, they acknowledged him as a master who had thrown an unexpected light on dark and difficult questions respecting the earth's structure, and to the diffusion of this light they actively and zealously applied themselves. On one occasion, when the three friends had dined together at the house of Townsend, it was proposed that Smith's views respecting the strata, verified and improved by their joint labours, should be drawn out in a tabular form. From his dictation, Richardson wrote down the names and descriptions of the different strata, in the descending order, commencing with the chalk and terminating with the coal, below which the strata were not then sufficiently known to be admitted into the table. Opposite each stratum were placed the names, supplied by Richardson, of its most remarkable fossils, which were the names then current among collectors. Of this document—the original, in the hand-writing of Richardson, was presented in 1831 to the Geological Society—each of the party retained a copy, under no restrictions as to the use to be made of it; on the contrary, Smith, as Richardson has declared in a letter to Professor Sedgwick, at the time of the award of the Wollaston medal, with that liberality by which he was ever characterized, wished it to be communicated; and it was communicated to many both in England and on the Continent, who took an interest in geological inquiries.

This tabular view was regarded merely as an index of what Smith had to communicate on the subject of discoveries so novel and important, and for the purpose of diffusing more widely the knowledge of the strata which he had acquired by long study, he was introduced by his friend Richardson to Dr. James Anderson, then publishing "*Recreations in Agriculture*," who not only offered the pages of his work, as the medium for the promulgation of his discoveries, but proposed a pecuniary remuneration for his papers. In vain, however, Dr. Anderson claimed the promised communication. Professor Phillips appears to think that his uncle was too sensitive on the subject of his literary qualifications, and expected some assistance from the doctor in that respect.

Perhaps he found more profitable and congenial employment in his professional pursuits.

The wetness of the winter of 1799, and the consequent failure of the crops upon the clay soils, brought him a great accession of practice in the draining of land and in cutting off the springs by which numerous and extensive landslips were produced in the neighbourhood of Bath. Guided by the broad principles of the true theory of springs, which his geological knowledge afforded, he succeeded, at a subsequent period, in draining the Prisleigh Bog, belonging to the Duke of Bedford, in which the celebrated Elkington had failed, who had invented a system of draining applicable to a large class of boggy and springy soils, for which he received from Parliament a grant of £1000.

Mr. Stephens of Camerton, chairman of the Canal Company, and Mr. Crook of Sytherton, one of the best farmers of the Bath district, were the first encouragers of Mr. Smith in this new career; and for several years he was almost continually occupied in the draining and irrigating of land. The remuneration which he had received during his engagement with the Canal Company was one guinea a day, with an allowance for extraordinary expenses, and these were at first his terms as a draining engineer. From the year 1801, he raised them to two guineas a day, besides travelling expenses; and at a late period, to three guineas.

"Any other," says his nephew, "equally moderate in his personal expenses, and, like him, employed professionally every day for many years, would have at least escaped poverty; but Mr. Smith at no time abounded in money. The principal cause was the liberal, nay the lavish manner in which he expended his means in endeavouring to accomplish his favourite object—the Map of the Strata of England and Wales. For this end he walked, or rode, or posted, in directions quite out of the way of his business, and having thus emptied his pockets for what he deemed a public object, was forced to make up by night-travelling the time which he had lost, so as not to fail in his professional engagements."

The late Lord Leicester, having witnessed at Mr. Crooks' the successful results of Smith's draining operations, invited him to Holkham, employed him in a variety of works, recommended him to others, and not only appreciated his abilities for agricultural improvement, but took a warm interest in his scientific discoveries. In 1801, urged by the advice of his friend Richardson, who was apprehensive that his discoveries would be published by others, instead of emanating from himself, he issued a prospectus and proposals for a work entitled "Accurate delineations and descriptions of the natural order of the various strata that are found in the different parts of England and Wales, with practical observations thereon." This prospectus was extensively

circulated, the subscription list began to fill, Debrett was chosen as the publisher, a small manuscript map of England, to accompany the work, was put into his hands to be engraved, and Mr. Richardson urged the propriety of the simultaneous publication of a Latin edition, for the benefit of all Europe, and to prevent any pirated French edition.

In the summer and autumn of 1801, Smith was introduced to Sir Joseph Banks and the Duke of Bedford, both of whom became his zealous friends and patrons. The Duke not only gave him much employment in draining and irrigation, but encouraged and assisted his geological investigations. He directed that an exploration of the margin of the chalk hills, south of Woburn, by Smith and Mr. Farey, his land-agent, accompanied by Mr. Bevan of Leighton, for the purpose of reporting on the correctness of his views respecting the strata, should be undertaken at his expense. During this expedition, Smith astonished his companions, as he had before astonished his friends Richardson and Townsend, by a verified prediction of the nature of the fossils which would be found in the strata at the base of those hills.

The Duke of Bedford being now convinced of the truth and reality of Smith's discoveries, ordered a stratigraphical collection of rocks and fossils to be formed at Woburn, and proposed to undertake the chemical examination of them. This Smith considered the most auspicious period of his life, and the plan formed by the Duke, for making himself and others acquainted with the nature and results of his researches, just such as he wished to carry into effect. The sudden death of the Duke, however, clouded these bright prospects, and delayed indefinitely the publication of the proposed work to which a final stop was put by the embarrassments of Debrett.

In the meantime, copies of the tabular view of the strata, drawn up in MS. in 1799, had become extensively circulated; and while the unpublished discoveries of Smith were thus known to many, nothing but the most praiseworthy forbearance on the part of those who had turned their attention to the examination of the geology of Britain, saved him from the annoyance of being anticipated in his map, by some inferior compilation, and by notices of his discoveries, which his wandering life and professional occupations rendered it difficult for himself to prepare. To such an ungenerous appropriation of the results of his labours he was not, however, exposed, at a time when the most meagre attempt at a delineation of the stratification of the British isles, or of any considerable portion of them, would have been well received, and would have been productive of fame, if not profit, to the editor. On the contrary, Mr. Townsend presented him with drawings of some of the fossils, in his own and other col-

lections, most characteristic of the strata in which they occur, for the purpose of illustrating his work. Mr. Richardson and other friends forwarded him notices of observations made in the course of their journeys, and Mr. Farey, who had quitted his situation at Woburn, and was profiting by the knowledge he acquired from Smith, to practice as a mineral surveyor, lost no opportunity of asserting the priority and importance of Smith's discoveries, and of urging their immediate publication. The brother of Duke Francis, who succeeded to his title and estates, continued to take interest in Smith's pursuits; the project of a geological museum at Woburn was not wholly abandoned; and after Debrett's failure, new hopes arose from the patronage of Sir Joseph Banks and Mr. Crawshay, in addition to that of the Duke of Bedford and Mr. Coke. Mr. Crawshay proposed not only to aid the publication of the result of Smith's researches by pecuniary assistance, and by securing the co-operation of his friends, but undertook to induce a competent person to arrange and prepare for the press his voluminous and too desultory papers. The Duke recommended him to Arthur Young and the Board of Agriculture, before whom he explained, in 1803, the progress he had made in the examination and mapping of the strata of England and Wales, and the application of geology to agriculture, and he was desired to prepare some specific proposal for bringing his discoveries before the public. At the Woburn sheep-shearing, the following year, Sir Joseph Banks, after hearing similar explanations, declared them to be of so much importance that the world must have them; and that Smith's unaided means were inadequate to the production of either map or book. He therefore drew up a paper for circulation among the visitors, expressive of his sentiments on the subject, put down his name as a subscriber for one hundred pounds, and presented him with a cheque for fifty pounds as the first half of his subscription. The project, however, went no further. A plan for joining Smith to the corps of engineers employed on the Ordnance Survey was proposed at the Board of Agriculture, but fell to the ground. The Government and the public, though induced after a lapse of more than thirty years, to undertake a geological survey of Great Britain, were not ripe for it then. The British Association has done much to rouse both to an appreciation of the economic value of science, and to smooth the rugged path of discoverers like William Smith. He himself has not escaped censure for the failure of this second attempt to publish the results of his labours, which have been attributed to habits of procrastination, which induced him to postpone, in favour of a reckless and insatiable thirst for fresh discoveries, the task less congenial to him of preparing for publication the results already obtained.

His nephew pleads in his defence the incessant professional exertions and constant travelling, extending to ten thousand miles a-year, which added to the mass of accumulated knowledge of the strata, and swelled his voluminous notes, without leaving him time for arrangement and condensation. His fossils, too, were at Bath, his papers in London; and a fire, which broke out in the house where the latter were deposited, caused them to be removed in a hurry and in disorder. To remedy these inconveniences, he engaged a large house in Buckingham Street, Strand, where his collection and maps were publicly exhibited, and where, for some time, he employed an artist in making drawings for the engraver. In a letter to Mr. Crawshay in 1805, he says—

“Every body agrees that the mass of information which I have collected is very great, and likely to be of public utility, but I find more difficulty in bringing it to market than I expected. Mr. Townsend, who has very liberally furnished me with the drawings of all his fossils, has informed me that it will not cost less than three thousand pounds to bring out the publication in two quarto volumes, which, he says, cannot be sold for less than six guineas. The expense of such a publication is too great for my circumstances, and the price of the work will probably preclude many from becoming purchasers, and there seems to be a tardiness amongst many of the great personages who were expected to subscribe very liberally, that makes me loth to engage with proper persons to engrave more of the plates, unless I could be sure of defraying the expense.”

Professor Sedgwick, in his address to the Geological Society in 1831, on the occasion of the award of the Wollaston medal, made the following remarks on this subject :—

“Why his hopes of patronage were disappointed, and why his works were so long retarded, not by any want of zeal on his part, but by want of assistance from the public, it is not for me now to inquire. The fact, however, is not difficult of explanation. At the time his prospectus made its first appearance, none of the magnificent discoveries of Cuvier and Brongniart were, I believe, published; the Geological Society of London had no existence; the branches of natural history connected with secondary geology were but little cultivated, and not much known in this country; and hence some persons, perhaps, doubted the reality of Mr. Smith's discoveries, on a subject they had been taught to regard as empirical; and the public at large took but little interest in what they did not understand. He suffered, therefore, as many men of genius have done before him, for that which, in our estimation, constitutes his chief honour, from outstripping the men of his own time in the progress of geological discovery.”

In 1806, Smith at length made his *debut* as an author, by the

publication of a treatise on the construction and management of water meadows. The Society of Arts had conferred their medal on him, in 1805, for the drainage of the Prisleigh Bog, which had been his chief employment during his first visit to Woburn in 1801; a full description of the process employed is given in the above treatise on irrigation, for it was by irrigation in conjunction with drainage that he had converted a worthless swamp into valuable meadows. Another of his achievements about this time was the stoppage of the sea breaches in the barrier of sand hills, between Happisburgh and Winterton, on the coast of Norfolk, which form the only defence to more than forty thousand acres of valuable land in the valleys of the Yare and the Waveny, lying below the level of high water, and commanding only a very limited fall at low water. From this tract, which in Roman, if not Saxon times, constituted a broad estuary, the sea had been excluded by the gradual accumulation of these sand-hills, and by the obstructions caused at the outfall of the rivers, by the ruins of the wasting cliffs of clay and sand, between Weybourne and Happisburgh, borne to the S.E. by the force of the tidal current. Storms of unusual violence occasionally broke through the weakest points of this barrier. In 1801, the collective length of the breaches exceeded a mile, and the sea was re-asserting its dominion over seventy-four parishes in Norfolk, and sixteen in Suffolk. Three years were spent by Smith in fruitless endeavours to persuade the Commissioners who had the care of these marshes to abandon defences of masonry and timber, and to resort to others more in accordance with the operations of nature. At length he persuaded some of them to accompany him to the sea-shore, where he pointed out the superior efficacy of sloping banks of sand and pebbles in particular directions to resist the fury of the sea, over solid constructions, and caused them to exclaim, "Oh, that none of us should have thought of this before!" Having now permission to adopt his own plans, the breaches were closed in little more than one summer, and the German Ocean now spends its fury harmlessly on Smith's unresisting slopes.

Another of his triumphs was the restoration in 1810 of the hot-wells at Bath, which had failed. After much opposition, he was allowed to open the spring to its bottom, when he detected the channel by which the waters escaped, succeeded in stopping it, and thus secured to Bath its jeopardized prosperity. The escape of the Bath waters was attributed at the time, and with some probability, to the opening of a colliery at Batheaston, distant three miles, which was inundated by an influx of water, said to be of a high temperature. Here he succeeded in plugging the bore hole at the bottom of the pit, through ninety feet of water. The

works, however, were subsequently abandoned, perhaps from fear of the injurious effects they might produce on the hot-springs of Bath.

In 1812, an agreement was entered into by Smith with Mr. Cary the engraver, for the publication of his long-expected Map of the Strata. A crisis had arrived which rendered exertions to bring it out more necessary than ever, and showed that, if his discoveries were to be published at all as his, they must be published speedily. Other active and energetic labourers were in the field, with the advantage of knowing the results of his labours. The Geological Society of London was founded in 1807 by those who took the most interest in investigating the mineral structure of the earth, and who, wearied at length with the Neptunian controversy in which they had so long been fruitlessly engaged, and convinced that they were not yet in possession of sufficient data for the construction of a true theory of the earth, associated themselves for the purpose of observing phenomena without reference to hypothesis, and of thus collecting materials for future generalization. What they now proposed to do, Smith had long been doing. While they were disputing about systems based only upon hypothesis, or at the best on too narrow an induction, he was slowly and laboriously collecting facts, and founding on them those safe and limited generalizations which they warranted. While the Wernerians would recognize no rock which could not be brought into accordance with the classification and nomenclature of Freyberg, he had determined the order of succession of the whole secondary series of England, down to the coal formation. While they set up mineral characters and the angles made by the planes of crystals as the only standard for determining the age of rocks, he ascertained that organic remains, called by them extraneous fossils, were an unerring test for the identification of distant parts of the same stratum, under a change of mineral type. The application of this principle, in other hands, has disentangled the intricacies of a vast mass of fossiliferous strata below the coal measures, and has established above the chalk a long sequence of deposits, exhibiting a gradual zoological passage to existing animal and vegetable species. Sinking minor differences of stratification and organic remains, once too much insisted on, but now proved to be merely the effects of local agencies, it has been found, that the classification thus established in England and the neighbouring countries, is applicable not only to the whole of Europe, but to every portion of America, Asia, and Africa, yet geologically explored. In all these distant regions, certain groups of fossils are found, occurring in the same invariable order of succession, however the composition of the matrix in which they are imbedded may differ. The same families and genera, for in-

stance, occur in the chalk of England and the sandstone which represents it in America.

While the land-surveyor of Oxfordshire was engaged in a career of research so different from that followed by the most eminent mineralogists of the day—the terms geology and geologist were then hardly known—it is not surprising that they should have overlooked the merit of his labours. Bakewell, who called himself of the School of Smith, has recorded, in the preface to the second edition of his *Introduction to Geology*, published somewhat later than the period of which we are writing, that a professor in one of our Universities being asked what he thought of the views advanced in that work, replied—"I wonder where the fellow got his information;" adding rather contemptuous expressions with regard to one who was not a "well-educated geognost," which means, says Bakewell, one who observes nature with his own eyes, and will not be satisfied to see it through the spectacles of Werner.

While some of his earliest friends were admitted as honorary members of the Geological Society, Smith was passed over unnoticed, except by visits from Mr. Greenough, the President, and a few of the members, to his house in Buckingham Street, to inspect his collections, maps, and sections. Besides the formation of the Society, there were other excitements to exertion for the publication of his map and description of the strata. Sowerby had begun to prepare drawings for his *Mineral Conchology of Great Britain*. Farey, under the patronage of the Board of Agriculture, brought out a mineral survey of Derbyshire in 1811, and in 1812, Smith's friend, the Rev. Mr. Townsend, published his "*Character of Moses vindicated as an Historian*." With all these powerful incitements to immediate publication, the resources of Smith, notwithstanding the aid they received from Sir Joseph Banks, and a few other liberal patrons, would have been unequal to the preparation of a large and costly map, but for the courage and resolution of Mr. Cary—the enterprize of a private tradesman thus accomplishing that which had been hoped for in vain from public boards and the patronage of the noble and the wealthy landowners of Britain.

On the map of this engraver, which had long enjoyed a high reputation, Smith had been accustomed to record his discoveries, laying down only those points, and drawing in those lines, which had been actually observed. It was found, however, impossible to give the necessary details of a complete geological map on one so crowded with political names and divisions; and Mr. Cary, accordingly, undertook the drawing and engraving of a new map, in which natural divisions should be substituted for these, and on which should be exhibited the numerous small streams which

form so important a feature in physical geography. During the two following years, Smith was occupied in the work of completing his map, and in professional occupations, which supplied the necessary funds. Unexpected difficulties arose in the details of so novel a work as the engraving and colouring of a geological map, but these were ultimately overcome. In 1814, some portions were coloured, particularly four sheets, comprising the country in the vicinity of Bath; and Smith was exhibiting and explaining these before the Board of Agriculture, and its president, Lord Hardwicke, while the Allied Sovereigns were entering London. In the spring of 1815, a complete coloured map of the strata of England and Wales was submitted to the Society of Arts, and received the premium of fifty pounds, which they had for several years been offering for such a work. On the 1st of August, in the same year, it was published, with a dedication to Sir Joseph Banks. Smith's fame as an original discoverer was now secure.

"Would," says his nephew, "that this period of revived and enlarged reputation, had also been the dawn of more prosperous fortunes; or that, satisfied with the degree in which he had accomplished his gigantic task, he had left to others the completion of his work, and devoted himself for a time to even the humblest of those professional labours, by which he had been at least supported through oppressive difficulties, and by which he must already have grown comparatively rich, but for the incessant drain of money in following up discoveries, which no living man could reasonably hope to complete. If this be censured, as the scholium of a feebler mind, and less fervid temperament than that which led Mr. Smith through his mighty enterprise, some allowance may be made for the feelings of the writer, who, in this year, at too early an age, began to enter the shadow of those calamities in which his revered relative was plunged."

To the embarrassments arising from the expenditure of his professional gains in the completion and publication of his discoveries, and from the too frequent neglect of his employers, in delaying the payment of his professional services, were added those arising from an unsuccessful speculation. In an evil hour he had been tempted to lay a railway through his little property near Bath, for the purpose of bringing the freestone of Combe down to the coal canal—to open new quarries—and to establish machinery for sawing and shaping it. The project, which promised well at first, failed from the exhaustion of the quarries. The compulsory sale which followed, of this estate, so dear to him, left him still involved with a load of debts, and the sad consequences fell on others as well as himself. To relieve his difficulties he proposed the sale of his geological collection, which the Government purchased of him for the British Museum. The

total sum paid him was seven hundred pounds: five hundred in 1816; another hundred pounds in 1818, for an additional collection from North Wilts, Essex, &c., to complete the series; and one hundred pounds for the trouble of arranging and making a catalogue of them. The number of specimens was 2657, comprising, it was supposed, 693 species. There was a difficulty in making these specimens—which were arranged on sloping shelves to represent the strata—part of the collection open to the public. The authorities of the museum assigned to the collection first one apartment, and then another; and now the state of this, the first stratigraphical collection ever made, is unknown. If not destroyed, it is to be hoped they will be rescued from obscurity, and transferred to the more appropriate resting-place of the Museum of Economic Geology in Craig's Court, in company with the Mantillian collection of Sussex reptiles, since purchased by the nation, which appears to be doomed to a nearly similar fate in its present abode. A portion of the descriptive catalogue of the collection purchased for the British Museum was published in 1817, under the title of a "Stratigraphical System of Organized Fossils," with coloured tables, shewing the geological distribution of particular groups. In the same year was also published the first number of a work, which it was purposed to complete in seven numbers, consisting of numerous figures of fossils, engraved by Sowerby. The title of it was, "Strata identified by Organized Fossils." From the expenses of publication, and the slight encouragement it received, it never advanced beyond the fourth number. At the same time commenced the publication of a series of county maps, coloured on the plan of the map of the strata of England and Wales, but carrying out the delineation of their boundaries in greater detail. The series comprised twenty-one counties, including Yorkshire.

In the year 1818, Dr. Fitton, in an article in the *Edinburgh Review*, entitled "Notes on the progress of English Geology," fairly and fully advocated the claims of Smith as a great original discoverer in geology, and thus laid the foundation of their recognition in 1831, by the Geological Society and the British Association. Dr. Fitton, in the same paper, did ample justice to those early observers who had preceded Smith, and whose names were fast sinking into oblivion, showing how nearly they had approached to a true knowledge of the true laws of stratification, and how far they had come short of it, before the path of discovery was lost in the speculations of Burnet, Whiston, and Whitehurst, to be only partially regained by Woodward, and very nearly attained by Michell.

In the winter of 1818-19, Smith visited Churchill, to re-

examine the spots where he and his boyish companions had collected "pundibs" for marbles, to talk with some of its old men over the tales of local wonder which had astonished his boyhood, and to laugh with boyish glee at those which were of a humorous cast—to muse on his altered views of geological phenomena—to muse, perhaps, on the changes which had come over his native village and himself since he quitted its homely pursuits for a life of toil and wandering in the pursuit of fortune and of science. He had sold his humble paternal roof, and the acres which his forefathers had owned for at least two hundred years, and had expended the proceeds, with a large portion of his professional gains, in the accomplishment of a national work; and while he, in the pursuit of this object, had reduced himself to poverty, but earned imperishable fame, his brother, following in his native village the humble pursuits of trade, had become a rich and prosperous man.

"Many changes had come over that village: one of the largest and most honoured elms had fallen; the great common field was but a name; it could no longer be said, as previous to the inclosure in 1787—might have been at least poetically said—that

‘Every rood of ground maintained its man.’

The yeomanry had sold their ‘yard-lands,’ and been transformed into tenantry renting the broad acres of the squire. ‘Times were altered:’ there was no longer a treasurer for the ‘Whitsun-ale;’ but the ‘wake’ was still a scene of merriment, to which, among other idlers, the gypsies still gathered from ‘the Forest’ of Whichwood; and Mr. Smith yet found, among the old inhabitants, some who would remember the digging of Sarsdere pond with its ‘golden’ stones (iron pyrites), and the ornamental planting of Daylesford by ‘Governor Hastings,’ and laugh with him over the marvellous tales of ‘horses having run their feet off’ in dragging the ‘fly coaches’ on the Oxford road at a pace inconceivable to the slow Saxons of the ‘Cotteswolde Hilles.’”

Smith’s financial difficulties did not end with the sale of his estate near Bath. In the autumn of 1819, he was compelled to submit to the sale of his furniture, the remainder of his collections, and his books, only preserving his maps, sections, drawings, and papers, through the kindness of a friend. “One more used to monetary transactions would,” his nephew says, “have foreseen and averted the blow.” He was in Yorkshire when it happened, “busily engaged, apparently oblivious, perhaps sternly regardless, of what seemed to others an insupportable misfortune. He deemed it an inevitable corollary to his irretrievable losses in the unlucky speculation near Bath, and armed himself with what seemed more than fortitude to bear it.” He now quitted London, and became for seven years a wanderer, without a home,

in the North of England, occupying himself with explorations for the completion of some of his county maps, and with such professional business as still sought him out in his most lonely retreats, and yielded him a scanty and fluctuating income. His principal places of rest during these seven homeless years were Scarborough and Kirby Lonsdale. It was during this period that the Father of English Geology became acquainted with some of his most worthy sons. To Dr. Buckland he was introduced in 1820, at the house of Mr. Bliss the bookseller, when passing through Oxford on a pedestrian tour to London. Mr. Murchison visited Scarborough in 1826, and Smith accompanied him in a trip by boat to Whitby, pointing out the principal results of his comparison of the oolites and lias of Yorkshire with those of the South of England, receiving not long after, with much gratification, Mr. Murchison's Memoir on the more northern oolite coalfield of Brora. His introduction, while residing at Kirby Lonsdale, to Professor Sedgwick, then examining the vicinity, was highly characteristic. The stone-masons of the village had remarked his curious habit of trying the hardness of the stones with his teeth, and concluding, by the ponderous hammer which the Woodwardian Professor carried, that they were "of the same trade," brought the two geologists together. One of the most important professional engagements of Mr. Smith at this period, affording a convincing proof of the value of geological knowledge in the solution of practical problems, was the survey of the estates of Colonel Braddyll, which ended in the opening of the South Helton Colliery. This valuable work owes its existence to the perseverance of the proprietor in trials, undertaken on the strenuous advice of Smith, founded on geological data, in opposition to the dogma of "no coal under the magnesian limestone," the cherished error of the most eminent coal viewers of the north, "practical" men who are guided only by their own limited experience, unaided by general principles deduced from more extended observation. Smith hoped to have had the superintendence of the execution of the work, which would have had no existence but for his honest and fearless recommendations. In this, however, he was disappointed. The means which were adopted at his suggestion to procure a supply of water for Scarborough, presented another instance of the economic value of his pursuits.

So deep in general was his seclusion during his abode at Kirby Lonsdale, that he only heard by indirect means, and not till long after the date of the application, that an urgent official demand had been made from Russia for his services as a mineral surveyor.

In consequence of an acquaintance formed with one of the re-

sidents at that romantic village, Smith was engaged in 1824 to deliver a course of lectures on geology before the Philosophical Society of Yorkshire, which led to similar engagements in conjunction with his nephew, with the Philosophical Societies of Hull and Sheffield. Shortly before he lectured at the latter place, he had been attacked by a rheumatism or paralysis of the lower extremities brought on by over exertion in exploring some of the peculiarities of structure in the Scarborough Cliffs. He nevertheless accepted the engagement while he was incapable of walking, and was actually lifted into the carriage which conveyed him to the lecture-room.

"It was a singular spectacle," says his nephew, "to witness the delivery of lectures which required continual reference to large maps and diagrams, by one who could not stand, but was forced to read his address from a chair, to an audience of several hundred persons, in a room not very well adapted to the voice. But it was far more extraordinary to witness, during all the severity of the disorder, the unpretending patience and fortitude of the sufferer, who, had he then permitted his mind to dwell too curiously on the state of his health, and the state of his finances, might have added the bitter foretaste of want and privation to the actual difficulty of the moment. Such reflections, and such anticipations, might sadden the hearts of those who surrounded him, but he would have thought it unworthy of his resolved mind and firm trust in Providence to have abated one jot of his accustomed cheerfulness, shortened one of the innumerable playful stories which were always on his lips, from the rich treasure-house of his memory, or turned his meditations from their favourite subjects."

With the departure of the malady, from which he slowly recovered, his days of adversity likewise departed. About this time he gained the friendly regards of Sir John V. B. Johnstone of Hackness, which he retained to the close of his life. That gentleman being desirous to secure, for the improvement of his estates, the union of practical and theoretical knowledge, of which Smith possessed so much, engaged his services as his land steward. In this capacity he resided at Hackness from 1828 to 1834, and these his nephew regards as the happiest and calmest days of his life. His kind friend and patron flattered himself that the leisure which this comparatively easy employment afforded, would have been employed in preparing for publication a review of the circumstances of his life, and the arrangement of his observations and opinions. In this, however, he was disappointed. Smith wrote much, and meditated more, but arranged nothing; and a beautiful geological map of the Hackness estate, executed in great detail, was the only work he gave to the public.

Honours now began to flow in upon him. Dr. Wollaston had

invested one thousand pounds in the joint names of himself and the Geological Society, and directed that after his decease the dividends should be employed in such manner as the Council might think proper in promoting researches, and in rewarding those by whom they should be made. In fulfilment of these instructions, the dividends of the first year were appropriated to the acquisition of a die by Wyon, bearing the impress of the head of Dr. Wollaston; and, in January 1831, the Council resolved that "the first Wollaston medal should be given to Mr. William Smith, in consideration of his being a great original discoverer in English geology, and especially for his having been the first to discover and teach the identification of strata, and the determination of their succession by means of their imbedded fossils."

On Professor Sedgwick, who then filled the President's Chair, devolved the office of announcing this award at the ensuing general meeting of the society. After giving a brief sketch of Smith's career, he expressed himself in the following terms:—

"I for one can speak with gratitude of the practical lessons I have received from Mr. Smith; it was by tracking his footsteps, with his maps in my hand, through Wiltshire and the neighbouring counties, which he had trodden nearly thirty years before, that I first learned the sub-divisions of the oolitic series, and apprehended the meaning of those arbitrary, and somewhat uncouth, terms which we derive from him, as our master, which have long become engrafted into the conventional language of English geologists, and, through their influence, have been in part adopted by the naturalists of the Continent.

"After this statement, gentlemen, I am entitled to speak boldly, and to demand your approbation of the Council's award. I could almost dare to wish that stern lover of truth, to whose bounty we owe the donation fund—that dark eye before the glance of which all false pretensions withered, were now amongst us; and if it be denied to hope that a spirit like that of Wollaston should often be embodied upon the earth, I would appeal to those intelligent men, who form the strength and the ornament of this Society, whether there was any plea for doubt or hesitation, and whether we were not compelled by every motive which the judgment can approve, and the heart can sanction, to perform this act of filial duty, before we thought of the claims of any other man, and to place our first honour on the brow of the Father of Geology.

"If, in the pride of our present strength, we were disposed to forget our origin, our very speech would bewray us, for we use the language which he taught us in the infancy of our science. If we, by our united efforts, are chiselling the ornaments, and slowly raising up the pinnacles, of one of the temples of nature, it was he who gave the plan, and laid the foundations, and erected a portion of the solid walls, by the unassisted labour of his own hands."

The medal, completed in 1832, was delivered to Smith at

- Oxford, in the presence of the British Association, whose second meeting was held within the walls of that University; and he received, at the same time, the gratifying intelligence that the Government, on the recommendation of the Association, had granted him a more substantial reward in an annual pension of one hundred pounds.

In 1834 he relinquished his situation at Hackness.

"I was weary," he says in a paper dated Scarborough 1839, "of nothing but farming concerns, and told my good friend Sir John Johnstone, that I wished to leave it, and that as the last five or six years of a man's life were seldom good for much, I wished to have them to myself, provided I lived so long, to complete and arrange my papers, without the interruption of any business, to which he readily assented, and allowed me twenty pounds a-year for occasional advice and assistance."

Many papers, however, bearing the date of Hackness, show that he had sufficient leisure there for the arrangement of his papers, had he been capable of using it for that purpose.

His mode of life at Scarborough, to which he now removed, is thus described by his nephew:—

"Buried in the seclusion of his study, full of his own maps and manuscripts, or wandering beneath the cliffs, whose geological structure he was the first to comprehend, his mind was strung anew, and it might have been expected that the thousands of facts which his memory retained should be methodized into laws of phenomena, and the characteristic and unusual inferences which he expressed on the theory and economical applications of geology, have acquired a systematic form. Such were his own expectations, and it was owing rather to a discursive habit of mind, an excessive activity of observation, which seized upon, and gave temporary importance to every novelty, than to any want of industry and decision of judgment, that these apparently well-founded hopes were not fulfilled. Papers which required arrangement and condensation were augmented, and connected with new trains of thought; and as if the ordinary forms of expression were inadequate to match the vividness of his ideas respecting the structure of the earth, his thoughts on stratification were often clothed in humorous, if not always harmonious verse.

"Those to whom this play of fancy was revealed easily abandoned the belief that Mr. Smith's geological principles would ever become fully known through his own exertions; and as no inducement could persuade him to intrust to others the task which he felt it was his duty to accomplish, the case became, from year to year, more desperate, as the observations lost more and more of their freshness, and the generalizations of their novelty. Mr. Smith mixed too little with younger geologists to make the discovery, that, on the road which he opened, were racers more swift than himself, and few of his friends could undertake the painful task, of proving to him the unpleasant

truth, that the piles of manuscript, in which he fondly hoped that both fame and fortune were secured, were rapidly losing their value, as contributions to science, and articles of trade."

During Smith's residence at Hackness and Scarborough, he seldom went far from home, except to pay occasional visits to London, and to attend the meetings of the British Association. In London, to which he always carried large parcels of manuscript, his time was spent much in the same manner as at Scarborough. In the discussions of the Geological Society, and of Section C of the Association, he rarely took part except to mention some striking fact. His deafness, the only infirmity of age with which he was troubled, would have been a great impediment to this. But there were others. The geologists of this period were as much in advance of him, as has been already intimated, as he was in advance of his contemporaries thirty years before. Some of their higher generalizations furnished by more extended observations than his own—for he would take facts on no other authority—or derived from the aid of the collateral sciences of chemistry, botany, zoology, and mechanics, found no favour with him, and the want of early training to debate rendered him unequal to the intellectual encounter with such formidable opponents, to which the expression of his opinions would have exposed him.

The recurring anniversaries of the British Association were to him periods of great delight. His nephew has compared their effects on him to those of returning spring on the vegetable world. Besides the pleasure derived from the respect with which the presence of the Father of Geology was hailed in the Geological Section by its most eminent men, and the kind attentions he received from new and agreeable acquaintances with whom these erratic reunions brought him in contact, they frequently led one who had wandered so much over England, to old scenes, and the society of old friends. At the Dublin meeting in 1835, Dr. Lloyd, the Provost of Trinity College, and some of the most distinguished of the Fellows, vied with one another in kind attentions to him, and the University conferred on him the unexpected compliment of an honorary degree. It was now no small gratification to the veteran geologist to be addressed as Dr. Smith, and his friends, amused and pleased with the foible, took every opportunity of increasing the enjoyment. Dr. McLean, the Dean of the College, and Captain Portlock, the director of the geological survey, found pleasure in conducting him to scenes of geological interest. His mind was then occupied with questions of drainage and agricultural improvement, of which he was so thoroughly master; and Ireland, which

stands so much in need of both, would perhaps have derived benefit from his experience, but for the death of his friend, Dr. M'Lean. The inhabitants of Bristol sent him a special invitation to attend the meeting held in that city in 1836, and defrayed the expense of the journey; and then he renewed his acquaintance with the widow of his old friend, Richardson, and the daughter of the Rev. J. Townsend.

It was on his way to the Birmingham meeting of the Association in 1839, that he died. He had been associated in 1837-8 with Sir Henry De la Beche and Mr. Barry, in the commission for selecting the stone to be used in the erection of the new Houses of Parliament; and his knowledge of nearly all the quarries of building stone in the kingdom, was found of great benefit in the inquiry. Five days after the signing of the Report, he attained his 70th year, apparently in such vigorous health as promised years of prolonged life, if not of activity. After spending a few days with Mr. Barry in examining the quarries at Worksop, selected by the commission, he returned to Scarborough, in the neighbourhood of which he remained till July, chiefly occupied in walking over the Hackness farms. He then proceeded to London, attended the meeting of the Agricultural Society in Cavendish Square,—was occupied the following day with Mr. Pusey, one of its prime movers—attended the great meeting of the same Society, held shortly afterwards at Oxford, and after spending a few days at Nuneham, with the family of the Archbishop of York, from whom, for twenty years, he had received unvarying proofs of regard, revisited for the last time his rural friends at Churchill, and returned to London on the 9th of August. The meeting of the Association, to which he had received a special invitation, was fixed for the 26th, at Birmingham. On his way to it, he stopped at the house of his friends, Mr. and Miss Baker, at Northampton, examining their beautiful collection of Northamptonshire fossils, and gratified with excursions round the neighbourhood. Here he was attacked by a cold, which appeared of more consequence to his friends than to himself, particularly when diarrhoea supervened. Unaccustomed to illness, he reluctantly had recourse to medical advice. On the 26th, Professor Phillips was summoned from his official duties, as Secretary of the Association, to the death-bed of his uncle, who, calm and cheerful as usual, continued gradually to sink till the morning of the 28th, when he expired. His remains are deposited at the west end of the church of All Saints, at Northampton, in which, at the suggestion of Dr. Buckland, a tablet is to be erected to his memory by the subscriptions of geologists.

The person of William Smith was of large and athletic pro-

portions. Hardy himself, and sprung of a hardy, healthy, and long-lived race, and accustomed to strong exercise, he enjoyed, for the most part, robust health, though he suffered once or twice in the course of his life from ague and diarrhoea, caught by exposure to cold and wet. He never wore a great-coat, and spurned the use of gloves. The mental qualities for which he was most distinguished, were those of observation and memory, joined with firmness, which assumed, according to circumstances, the character of courage and resolution in professional and scientific labours, or cheerful and patient resignation under affliction. His appearance, air, dress, and manner, bespoke him what he was,—the sturdy, honest, warm-hearted, intelligent English yeoman,—a race, in its proper sense, now nearly extinct, but which has furnished, in its day, some of the most illustrious names in the intellectual annals of our country.

The order of succession of the strata, from the chalk to the coal measures, he may be said to have re-discovered, for Michell, Smeaton, and Cavendish, were aware of it, though they had not published the discovery; and Werner, independently and simultaneously with Smith, ascertained the order of succession in a part of Germany. The limitation of particular groups of organized bodies to particular strata—the successive existence of different organic groups on successive beds of the sea—and the distinction between the regular strata and the so-called diluvium, were discoveries exclusively his own.

Let those who persist in the exploded error, that the whole of the fossiliferous series, with all their extinct groups of organic remains, are the result of the deluge, or were formed since the creation of man, remember, that those eminent geologists on whom we have lately seen so much senseless vituperation lavished, commenced their geological career with attempts to explain the phenomena of the earth in accordance with the same views, and were compelled, by the force of facts, not taken at second-hand, but observed with their own eyes, to admit the truth of Smith's induction. Every subsequent observation has confirmed it, and makes larger demands for the time required for the operation of those mechanical, chemical, and vital agencies, from which have resulted a series of deposits, whose average collective thickness cannot be less, on the lowest computation, than six miles. Let those, also, who deny the economical value of geological knowledge, remember the many instances we have enumerated—and we might have added many more—in which it was applied by Smith with such signal success, in aid of some of the arts most useful to mankind—agriculture, mining, engineering, and architecture.

- ART. V.—1. “*Ironmaking*” and “*Smelting*,” in the *Encyclopædia Britannica*. 7th Edition.
2. *Report of Trial in causa, James Beaumont Neilson and Others against the Househill Coal and Iron Company*. Edinburgh, 1842.
3. *Report of Trial in causa, James Beaumont Neilson and Others against William Baird and Company*. Edinburgh, 1843.
4. *First Report of the Childrens’ Employment Commission (Mines), and Appendixes thereto*. London, 1842.
5. *Report of Special Commissioner on the State of the Population in the Mining Districts*. London, 1844.—*Report of do. do.* London, 1845.

“GEOLOGY, in the magnitude and sublimity of the objects of which it treats, undoubtedly ranks, in the scale of sciences, next to astronomy.” This remark of Sir John Herschel is verified by the most cursory glance at the researches of geologists. Although the range of their actual penetration has been limited to 3000 feet beneath the surface,* they present us with an analysis of the crust of our globe to a depth of ten miles. They tell us that, resting on a foundation of unstratified rocks, of igneous origin, there rise, in successive piles, a series of parallel stratified layers, deposited, from time to time, by the action of water;—they inform us that these strata, though, if left in their natural order, placed far beyond the reach of man, have been dragged up from their beds for his inspection and use, by the force of what may be termed volcanic levers;—they disclose to us the plants which flourished in luxuriant vegetation during each successive epoch of the earth’s history;—and they reveal to us the animals that roamed unrestrained amid the primeval forests and marshes of these far distant periods. So minute, indeed, are the discoveries of geologists, that they can even track the footsteps of the tortoise as it crawled over the long buried sands of another age;—thus warranting the following beautiful reflections by one of the most distinguished of their number.†

“The historian, or the antiquary, may have traversed the fields of ancient or of modern battles, and may have pursued the line of march of triumphant conquerors, whose armies trampled down the most mighty kingdoms of the world. The winds and storms have utterly obliterated the ephemeral impressions of their course. Not a track

* “The deepest mine in the world (Kitzpahl, in the Tyrol) is only 2764 feet below the surface.”—*Phillips’ Geology*, i. 18.

† Buckland’s *Br. Tr.*, i. 262.

remains of a single foot, or a single hoof, of all the countless millions of men and beasts whose progress spread desolation over the earth. But the reptiles that crawled upon the half finished surface of our infant planet have left memorials of their passage, enduring and indelible. No history has recorded their creation or destruction,—their very bones are found no more among the fossil relics of a former world. Centuries and thousands of years may have rolled away between the time in which these footsteps were impressed by tortoises upon the sands of their native Scotland, and the hour when they are again laid bare and exposed to our curious and admiring eyes. Yet we behold them stamped upon the rock, distinct as the track of the passing animal upon the recent snow, as if to show that thousands of years are but as nothing amidst eternity, and, as it were, in mockery of the fleeting perishable course of the mightiest potentates among mankind.”

But the science of geology is not more remarkable for its magnitude and sublimity than it is for its utility. By ascertaining the relative positions of strata to each other, it directs our otherwise blindfold search into the bowels of the earth. The importance of such a guide in a country like ours, where the strata of the carboniferous group abound, cannot be over estimated; and strikingly appears from two illustrations that may here be quoted :—

“ It is not many years since an attempt was made to establish a colliery at Bexhill, in Sussex. The appearance of thin seams and sheets of fossil-wood and wood-coal, with some other indications similar to what occur in the neighbourhood of the great coal-beds in the north of England, having led to the sinking of a shaft, and the erection of machinery on a scale of vast expense—not less than eighty thousand pounds are said to have been laid out on this project—which, it is almost needless to add, proved completely abortive, as every geologist would have at once declared it must, the whole assemblage of geological facts being adverse to the existence of a regular coal-bed in the Hastings’ sand; while this, on which Bexhill is situated, is separated from the coal-strata by a series of interposed beds of such enormous thickness, as to render all idea of penetrating *through* them absurd. The history of mining operations is full of similar cases, where a very moderate acquaintance with the *usual order of nature*—to say nothing of theoretical views—would have saved many a sanguine adventurer from utter ruin.”*

The next illustration is of an opposite kind :—

“ Only sixteen years ago (it is in our own memory), a valuable estate in Durham was pronounced to be devoid of coal, ‘ because it

* HERSCHEL’S *Int. to Nat. Phil.*, sec. 36, p. 45.

was situated on the magnesian limestone ;' and might have been sold under this opinion, but that a geologist of celebrity, Dr. William Smith, showed the falsity of the reasoning—reported favourably of the probability of finding good coal in abundance beneath the property—and advised the proprietor to work it. That estate is now the centre of a rich and well-explored mining tract, all situated beneath the magnesian limestone ; and this result was the fruit of scientific geology, not ' practical ' coal-viewing, though the professional mine-agents of the north of England are now employed in extending its benefits."*

The carboniferous group, of which mention has been made, contains ironstone, coal, and limestone ;

" and the occurrence of this most useful of metals (ironstone) in immediate connexion with the fuel requisite for its reduction, and the limestone which facilitates that reduction, is an instance of arrangement so happily suited to the purposes of human industry, that it can hardly be considered as recurring unnecessarily to final causes, if we conceive that this distribution of the rude materials of the earth, was determined with a view to the convenience of its inhabitants."†

It is to the distribution here referred to, that we owe the iron manufacture of Great Britain, of which a brief account will now be given.

Any one unacquainted with minerals, would be unable to discover the slightest affinity betwixt the rough ironstone, as brought up from the mines, and the iron of commerce. The two have apparently no properties in common. And it is only after subjecting the ironstone to severe processes of manufacture, that iron can be obtained from it. These processes include, 1st, the roasting or calcining it, so as to clear it from sulphur, carbonic acid, and other deleterious substances ; and, 2d, the exposing the calcined iron ore, so obtained, to intense heat in a blast furnace, charged with fuel and flux.

In early times, the furnace used for the latter purpose was of the rudest description—consisting of a low narrow conical structure, such as is still to be seen in Africa. It was called an *air-bloomery*, and was dependent, for its blast, upon the varying currents of air that played around the hill on which it was placed.

The *air-bloomery* was succeeded by the *blast-bloomery*, which, though not differing materially in construction, was blown by bellows, driven by water or wind power, whereby a more regular blast was obtained. This was its distinguishing feature ; and the change formed an important improvement in the manufacture of iron.

* PHILLIPS' *Geology*, ii., p. 295.

† CONYBEARE'S *Geology of England and Wales*, p. 333.

The *blast-bloomery*, in its turn, gave way to the modern *blast-furnace*, now almost universally used in the smelting of iron. The blast-furnace costs about £1500 to erect. It is a huge building of brick or stone, bulging out near the base, and gradually narrowing towards the top. Its height may be from 40 to 50 feet—its width from 12 to 15. And its capacity and strength may be estimated from the fact that the largest of these furnaces will hold 150 tons. The materials are thrown in at an opening in the top, by which the gases also escape; and the molten metal flows out from an aperture at the bottom, and is run into moulds of sand* made for the purpose of receiving it.

Cotemporaneous with the improvements in size, strength, and capacity of the modern furnace, were the improvements in its blast. A gigantic steam-engine has been substituted for water or wind, as the propelling power; and, in order to equalize the blast, this steam-engine transmits the air into a capacious cylindrical iron reservoir or regulator, (placed in the vicinity of the furnaces) from which the blast is conveyed to the fire—not as previously in irregular gusts—but in regular and continuous currents.

Another not less important change was the substitution of charred pit coal, or coke, for charred wood, as the fuel of the furnace. It was not until the end of last century that this change was completely effected. Coke had been tried in James the First's time, but had not succeeded; and the experiment was not repeated until the supply of wood had entirely failed, when the iron-masters were necessitated again to resort to coke, and finally to adopt it.

During the period of transition from the one fuel to the other, the iron manufacture was in a most languid state. A short time prior to 1740, the number and produce of the furnaces in England appears to have been very considerable; but, by that year, the number of furnaces had decreased to fifty-nine, being only three-fourths of their previous number, and their produce had fallen to 17,350 tons.

Such was the miserable state of the iron manufacture in England an hundred years ago. The following table shews its subsequent development down to the present time:—

1740, Number of tons of pig iron produced,	.	17,350
1788, Ditto,	.	61,300
1796, Ditto,	.	108,793†
1806, Ditto,	.	250,000†

* The main channel in the sand is called the *sow*, and the branches from it the *litter of pigs*—hence the name *pig-iron*.

† We are indebted for our knowledge of the Iron trade in 1796 and 1806, to the attempts made (unsuccessfully) at these periods to tax coal and iron, which caused inquiry into the subject.

1820, Number of tons of pig iron produced,	.	380,000
1827, Ditto,	.	654,500
1845, Ditto, (estimated)	.	1,250,000*

On looking over the materials from which this Table has been obtained, it is remarkable to notice the altered distribution of the furnaces in point of locality. So long as charred wood was used as fuel, Gloucester, Sussex, and Kent, were the principal seats of the iron manufacture; but, after the substitution of coke, the manufacture was transferred to Wales, Staffordshire, Shropshire, and Yorkshire where coal abounded.

Another remark that occurs is the gradual increase in quantity of the iron produced by *each* furnace in the year and week, as shown in the subjoined note:—

	Annually.			Weekly.		
	T.	C.	Q.	T.	C.	Q.
1740, Average produce of each furnace,	294	1	1	5	13	0
1788, Ditto,	796	2	0	15	6	0
1796, Ditto,	1046	0	0	20	2	0
1827, Ditto,	2460	0	0	47	6	0
1845, Ditto, (estimated)	5200	0	0	100	0	0

Thus, it appears that in England, during the last 100 years, the produce of iron has increased from seventeen thousand to a million and a quarter tons; and the yield of each furnace during the same period has multiplied nearly twenty fold—illustrating at once the extent of the demand, the capital expended, and the improvements introduced in the manufacture.

Turning from England to Scotland, we find the progress of the iron manufacture still more striking. The carboniferous strata of Scotland form a broad belt which traverses the centre of the island from the Firth of Forth to the shores of Ayrshire; and amongst this belt will be found the principal coal and iron works of the country. In the east of Scotland, the coal is wrought almost exclusively for family consumption; but in the west of

* According to a statistical return made by M. Goldenberg of Berlin, the following is the annual production of iron in the different European States:—

England (including Scotland also)	.	.	1,500,000 tons.
France,	.	.	350,000 ...
Russia,	.	.	320,000 ...
Germany,	.	.	150,000 ...
Austria,	.	.	100,000 ...
Belgium,	.	.	150,000 ...
Sweden,	.	.	80,000 ...
Other parts of Europe,	.	.	50,000 ...
Total,			2,700,000

Scotland, the iron-works absorb a great proportion of it—the fact being, that in one parish in Lanarkshire (Old Monkland) as much coal is consumed in a year at the blast-furnaces as is sufficient for the supply of the entire city of Glasgow, including its manufactories and public works.

Carron, near Falkirk, in Stirlingshire, was the first place in Scotland where iron-works were erected, and this occurred about 1767. After an interval of twenty years (1786) furnaces were put up at Clyde and Wilsontown in Lanarkshire. Within four years subsequently (1790) we find similar works established at Cleland or Omoa in the same county, also at Muirkirk in the inland part of Ayrshire, and at Devon, in Clackmannanshire. Fifteen years elapsed (1805) before the Calder and Shotts furnaces in Lanarkshire (which are next in the order of time) were built. In 1825, the Monkland Iron-Works, in the same county, were erected; in 1830, the Gartsherrie Works; and in 1834, the Dundyvan Works. Without proceeding farther with the enumeration, (which will be given in a tabular form) it may be stated, that Lanarkshire is now studded with iron-works; that Ayrshire is also being rapidly covered with them; that Renfrewshire, Stirlingshire, and Clackmannanshire have each their share; and that furnaces, on an extensive scale, are now building in Linlithgowshire and Fifeshire.

The progress of the Scottish iron trade appears from the quantity of pig-iron produced in Scotland at different periods, as shown in the following table:—

1788, Number of tons of pig-iron produced,	.	7,000
1796, Ditto,	.	16,086
1820, Ditto,	.	20,000
1827, Ditto,	.	36,000
1843, Ditto,	.	280,000
1845, Ditto, (estimated,)	.	400,000

The average produce of each furnace at most of the same periods may next be given:—

		Annually.			Weekly.		
		T.	C.	Q.	T.	C.	Q.
1788, Average produce of each furnace,		875	0	0	16	16	0
1796, Ditto,	.	912	0	0	17	11	0
1827, Ditto,	.	2000	0	0	88	8	0
1843, Ditto, (estimated,)	}	5200	0	0	100	0	0
1845, Ditto, (do.)							

And, in order to complete the general view of the subject, we

subjoin a state, showing the number and the distribution of furnaces in Scotland at the present time :—

FURNACES IN SCOTLAND (*October 1845.*)

I. IN LANARKSHIRE—				In blast.	Out of blast.	Total.
(1)	Carnbroe,	.	.	5	1	6
(2)	Calder,	.	.	5	3	8
(3)	Castlehill,	.	.	2	0	2
(4)	Coltness,	.	.	4	0	4
(5)	Clyde,	.	.	5	1	6
(6)	Dundyvan,	.	.	9	0	9
(7)	Garscube,	.	.	1	1	2
(8)	Gartsherrie,	.	.	15	1	16
(9)	Govan,	.	.	5	0	5
(10)	Langloan,	.	.	4	0	4
(11)	Omoa,	.	.	2	1	3
(12)	Monkland and Gartness,	.	.	7	0	7
(13)	Shotts,	.	.	3	0	3
(14)	Summerlee,	.	.	4	1	5
(15)	Wilsontown,	.	.	0	2	2
II. IN AYLESBURY—						
(16)	Blair,	.	.	3	0	3
(17)	Cessnock,	.	.	0	2	2
(18)	Glenarnock,	.	.	4	1	5
(19)	Muirkirk,	.	.	2	2	4
III. IN RENFREWSHIRE—						
(20)	Househill,	.	.	0	2	2
IV. IN STIRLINGSHIRE—						
(21)	Carton,	.	.	3	2	5
V. IN CLACKMANNANSHIRE—						
(22)	Devon,	.	.	2	1	3
				85	21*	106

The number of Scottish furnaces in blast, thus amounts to eighty-five; and, if to these are added about twenty new furnaces building, or about to be built, in Ayrshire, Linlithgowshire, and Fifeshire, the total number of furnaces at work in Scotland will, ere long, be 105, each yielding on an average 100 tons of metal per week, and producing together, in the year, upwards of 500,000 tons of pig-iron, being not much less than half the present total produce of England.

* Those out of blast are either undergoing repair, or have been stopped from want of ironstone or coal; and several of them will probably be resumed.

What a contrast is this to the former state of the iron trade in Scotland. In the forty years that elapsed betwixt 1788 and 1827, the quantity of iron made increased only from 7000 to 36,000 tons, while, during the period from 1827 to 1845—not more than eighteen years—the quantity has risen to 400,000 tons, and will soon reach half a million.

No doubt, much of the rapid improvement in the iron trade throughout the country, is justly to be ascribed to the numerous purposes to which iron is now applied as compared with former periods. When the Carron Works were established, and for many years after, the grates and other household articles for which these works became celebrated, were almost the only iron objects with which our eyes were familiar. But now, wherever we turn, we are met by iron. If we walk into the country, we see the clumsy wooden gates that long asserted their right to protect the farmer's enclosures, supplanted by iron. Pass from the country to the city, and we observe our churches, shops, and buildings all supported on pillars of iron, and our areas enclosed with iron. Travel by railroad from city to city, and we find ourselves propelled by iron, and flying upon iron. Cross along a bridge from one side of a river to another, and, in many instances, we observe the bridge constructed of and suspended by iron. Leave the land journey, and enter the steam-boat, and still we are incased in sheets of iron. In short, iron is every where on the aggressive; and we shall not be surprised to hear by and bye of iron floors, iron beds, and iron tables, as well as of the iron houses which are occasionally to be seen on their way to other climates.

This universal demand for iron, accounts for the rapid progress of the iron trade; and the improvements made from time to time in the manufacture have hitherto enabled the iron-master to meet the demand. We have already mentioned some of these improvements, but have purposely reserved the greatest of them all for a separate notice. We refer to the discovery, now well known by the name of the **HOT BLAST**, which was patented in 1828 by James Beaumont Neilson, manager of the Glasgow Gas Works.

His invention consists simply in heating the blast before it enters the furnace; and the apparatus to be employed for this purpose is equally simple, being a heating chamber, or vessel of any construction, placed betwixt the blowing cylinder and the furnace, to receive and heat the air in its passage from the former to the latter.

When this discovery was first announced, it was ridiculed and laughed at as the visionary idea of a person unacquainted with the subject. Practical men had long been universally agreed that the *colder* the blast the better the iron; and their

opinion appeared to be confirmed by the circumstance that blast furnaces wrought better and produced more iron in winter than in summer. Acting upon these views, the efforts of iron-masters had always been directed to the *cooling* of the blast; and various were the expedients devised for that purpose. There were instances even of the regulator being painted white, as the "coolest colour;" of the air being passed over water, and of the air-pipes being surrounded with ice; all shewing the exertions made in order to keep the blast cold. Nor was this notion confined to practical men. The scientific world was equally unenlightened on the subject; and it was stated in the London Cyclopædia, and Rees' Cyclopædia, that it was an advantage to use the blast as cold as possible.

It was against inveterate prejudices like these that the hot-blast had to contend; but, in course of time, all prejudices gave way, and Mr. Neilson's invention came at length to be acknowledged as one of the most important ever discovered. Professor Forbes of Edinburgh states, that it is now generally used, not only in Scotland and England, but also in France, Belgium, Switzerland, Russia, Prussia, Silesia, Hesse, and America. Professor Gregory of Aberdeen, characterizes it as the "greatest improvement with which I am acquainted." Mr. Mushet (whose name is distinguished in connexion with blackband ironstone) describes it "as a wonderful discovery," and as one of the most "novel and beautiful improvements that I have known in my time." Mr. Houldsworth, a Scottish iron-master, says in regard to it, that "it has been the making of the iron trade in Scotland." Mr. Jessop, an extensive English iron-master, expresses his opinion, that it is "as great an advantage in the iron trade as Arkwright's machinery was in the cotton-spinning trade." And a writer in the Encyclopædia Britannica states, that it has "effected an entire revolution in those branches of industry and of commerce connected with the manufacture and application of the most valuable of metals."

After testimonials like these, the reader will naturally expect the utility of the invention to be great and palpable; and he will not be disappointed. The saving in every ton of iron made by the hot-blast as compared with the cold-blast is,

	Quantity Saved.		Price	Money Saved.
	Tons.	Cwt.	per Ton.	
(1.) Coal,	5	0	at 5/6.	£1 7 6
(2.) Limestone, . . .	0	10	at 4/0.	0 2 0
(3.) Wages (saved by not coking the coal, &c.)				0 3 0
Total,	5	10		£1 12 6

And, at the same time, the furnace does double the work which it did with the cold-blast, whereby half the capital formerly required for the erection of furnaces is sufficient. Against this last benefit, however, has to be placed the expense of the apparatus for heating the air; and the one counterbalances the other, so that neither requires to be taken into the account.

The savings by the hot-blast arise, 1st, from it being unnecessary now to coke the coal used in the manufacture; 2d, from less raw coal being required as fuel; and, 3d, from less limestone being needed as flux.

These savings amount, as has been seen, to five tons of coal, and half a ton of limestone (in materials); and (in money) to £1, 12s. 6d., on each ton of iron produced by hot-blast.

And as, in Scotland, every furnace (with the exception of one at Carron) now uses the hot-blast, the saving on our present produce of 400,000 tons of pig-iron, is 2,000,000 of tons of coals per annum, 200,000 tons of limestone per annum, and the sum of £650,000 sterling per annum. In England the saving will be still greater; but as we have no accurate information as to the precise number of furnaces there at present using hot-blast, we cannot enter into details. Nor is it necessary to do so; for facts enough have been given to shew the immense importance of the invention in question, and the debt which the iron trade and the country owe to Mr. Neilson, for thus economizing our most valuable resources.

But, brilliant as is the result of Mr. Neilson's discovery, he had many difficulties to contend with; and it will not be uninteresting to endeavour to trace the history of his connexion with hot-blast.

In the New Statistical Account of Scotland (article, *Lanarkshire*), we find the following notice of Mr. Neilson's first introduction to the subject, which is the more valuable, as it appears to be drawn up from notes furnished by himself:—

“ In 1824, an iron-maker asked Mr. Neilson if he thought it possible to purify the air blown into blast-furnaces, in a manner similar to that in which carburetted hydrogen gas is purified; and from this conversation, Mr. Neilson perceived that he imagined the presence of sulphur in the air to be the cause of blast-furnaces working irregularly, and making bad iron in the summer months. Subsequently to this conversation, which had in some measure directed his thoughts to the subject of blast-furnaces, he received information that one of the Muirkirk iron-furnaces, situated at a considerable distance from the engines, did not work so well as the others; which led him to conjecture that the friction of the air, in passing along the pipe, prevented an equal volume of the air getting to the distant furnace, with that which reached to the one situated close by the engine; and he at once

came to the conclusion that, by heating the air at the distant furnace, he should increase its volume in the ratio of the known law according to which air and gases expand. Thus, if 1000 cubic feet, say at 50° of Fahrenheit, were pressed by the engine in a given time, and heated to 600° of Fahrenheit, it would then be increased in volume to 21,044; and so on for every thousand feet that would be blown into the furnace. In prosecuting the experiments which this idea suggested, circumstances, however, convinced him, that heating the air introduced for supporting combustion into air-furnaces, would materially increase its efficacy in this respect; and, with the view of putting his suspicions on this point to the test, he instituted the following experiments:—To the nozzle of a pair of common smith's bellows he attached a cast-iron vessel, heated from beneath in the manner of a retort for generating gas; and to this vessel the blow-pipe, by which the forge or furnace was blown, was also attached. The air from the bellows having thus to pass through the heated vessel above mentioned, was consequently heated to a high temperature before it entered the forge fire, and the result produced in increasing the intensity of the heat in the furnace was far beyond his expectation; whilst it made apparent the fallacy of the generally received theory, that the coldness of the air of the atmosphere in the winter months was the cause of the best iron being then produced. But in overthrowing the old theory, he had also established new principles and facts in the process of iron-making; and by the advice and assistance of his friends, he applied for and obtained a patent, as the reward of his discovery and improvement."

The friends to whose advice and assistance Mr. Neilson resorted, were Mr. Charles Macintosh of Crossbasket, Mr. Colin Dunlop of Clyde Iron-works, and Mr. John Wilson of Dundyvan Iron-works; and as capital was required to perfect the invention, and combined energy and influence were needed to introduce into practice what was then reckoned a useless innovation, Mr. Neilson saw it for his interest to communicate to these gentlemen a share in the patent.

"To Mr. Dunlop of Clyde Iron Works," says the writer in the *Encyclopædia Britannica*, "Mr. Neilson had to give up three-tenths of his patent rights; to Mr. Macintosh three-tenths; and one-tenth to Mr. Wilson of Dundyvan, retaining to himself only three-tenths of this valuable monopoly. But the transfer was judicious—it was necessary. Mr. Macintosh is distinguished as a man of much practical science; Mr. Dunlop was one of the most sagacious ironmasters of his time; and Mr. Wilson was a man of tried practical talent. The co-operation of these gentlemen was essential to the speedy and successful trial of the novel though simple process."

The patent was taken out on 1st October 1828, and endured for the ordinary term of fourteen years. Its title, which was written by Lord Brougham, describes it to be an "invention for the improved application of air to produce heat in fires, forges,

and furnaces, where bellows or other blowing apparatus are required." Within four months after the date of the patent, a specification was, as usual, lodged in Chancery, explaining the nature of the invention. The specification in this case, which was drawn up by the late Serjeant Bompas, is as remarkable for its perspicuity and brevity as the generality of specifications are for their obtuseness and length. It is in these terms :—

The patentee first describes the essential part of his invention in the following words :—

"(1.) A blast or current of air must be produced by bellows or other blowing apparatus now in use in the ordinary way, to which mode of producing the blast or current of air this patent is not intended to extend.

"(2.) The blast or current of air so produced is to be *passed* from the bellows or blowing apparatus into an *air-vessel or receptacle*, made sufficiently strong to endure the blast, and *through* and from *that vessel or receptacle* by means of a tube, pipe, or aperture *into the fire, forge, or furnace.*" And,

"(3.) The *air-vessel or receptacle* must be *air tight or nearly so*, except the apertures for the admission and emission of the air; and at the commencement, and during the continuance of the blast, it must be kept *artificially heated in a considerable temperature.*"

Having thus explained his invention, the patentee next proceeds to add such directions, in detail, as he had found necessary or useful in carrying it into effect.

"(1.) It is better," says he, "that the *temperature* be kept to a red heat, or nearly so; but so high a temperature is not absolutely necessary to produce a beneficial effect.

"(2.) The *air-vessel, or receptacle*, may be conveniently made of *iron*; but as the effect does not depend upon the nature of the material, other metals or convenient materials may be used.

"(3.) The *size* of the *air-vessel* must depend upon the blast, and on the heat necessary to be produced. For an ordinary smith's fire, or forge, an *air-vessel, or receptacle*, capable of containing 1200 cubic inches, will be of proper dimensions; and for a cupola of the usual size for cast-iron founders, an *air-vessel* capable of containing 10,000 cubic inches will be of a proper size. For fires, forges, or furnaces upon a greater scale, such as blast-furnaces for smelting iron, and large cast-iron founders' cupolas, *air-vessels* of proportionally increased dimensions and numbers will be required.

"(4.) The *form or shape* of the vessel or receptacle is immaterial to the effect, and may be adapted to the local circumstances or situation.

"(5.) The *air-vessel* may generally be conveniently *heated* by a fire distinct from the fire to be affected by the blast or current of air; and generally it will be better that the *air-vessels*, and the fire by which it is heated, should be enclosed in brick-work or masonry, through which the pipes, or tubes connected with the *air-vessel*, should pass."

And the patentee concludes his specification by reverting to

the substantial part of his invention, and inserts this general salvo—

“The *manner* of applying the heat to the air-vessel is, however, immaterial to the effect, if it be kept at a proper temperature.” In other words, “get my air heated. I don’t care how you do it; the manner is nothing to me; it is sufficient for my purpose to have heated air blown into the furnace.”

Having now obtained their patent and lodged their specification, Mr. Neilson and his partners proceeded to have the invention brought into use at the blast-furnaces of Great Britain. The first thing to be done was to determine the charge which they were to make for it. They appear to have been all agreed that, following the example of Watt,* it should be a proportion of the saving effected by employing the patent. They seem, however, to have differed for a time as to what that proportion ought to be; but ultimately concurred in fixing it at the low sum of one shilling for each ton of iron produced by the hot-blast. No doubt this moderate charge was made, in order to ensure the introduction of the patent into speedy use, as well as to prevent its infringement. How far the latter object was attained, will shortly be seen. The former object was speedily realized both in England and Scotland.

The first trials were made in Scotland at the blast-furnaces of Clyde and Calder. Gradually it was extended from time to time to other parts of Scotland, and to the mining districts of England. And, ultimately, when the patent expired on 1st October 1842, it was to be found at every furnace in Scotland, with one exception; at one-half of the furnaces in England; and at many furnaces on the continents of Europe and America.

During this period, considerable improvements were made in the shape of the air-heating vessels. At first these vessels were in the form of a round, or a square, or a cylindrical box—then they became more elongated—next partitions were placed in them,—and latterly the form adopted has been a congeries of tubes, whereby the greatest extent of heating surface is obtained for the thorough heating of the air.

These improvements in the heating vessels raised the temperature of the air introduced into the furnace from 240° to 600°, being the temperature of melting lead.

And this increased heat caused the introduction of another beautiful improvement in order to protect the nozzle of the air-

* “The object and result of Watt’s invention was (by condensing in a separate vessel) the saving of fuel; and the remuneration he asked and obtained, was a per centage of this saving. In like manner, the object and effect of Neilson’s invention was the saving of fuel, and that principally in the manufacture of iron,” &c.

pipe as it entered the furnace. The improvement referred to consisted in introducing, within the sides of the iron twyre through which the nozzle passes, a spiral pipe for a stream of water constantly to play. The twyre was thus kept comparatively cool, and formed an effectual protection to the nozzle of the air-pipe.*

All these improvements tended to illustrate more strikingly the worth of Mr. Neilson's invention, and to bring it more rapidly into use. But, notwithstanding its great advantage to the iron-masters, and the moderate remuneration asked from them in return, the patent did not escape the usual fate of valuable patents. It was soon the subject of litigation. The first litigation occurred in 1832. A party in Scotland who had obtained a license to use the patent at the stipulated price, refused, in that year, to pay the license duty; and contended, in the usual style of objectors to patents, that Mr. Neilson was not the first and true inventor—that the invention was not new—that it was not useful—that it was a patent for a mere principle—that the specification was unintelligible and inexplicit—and, finally, that the apparatus used by the objector did not fall under the patent.

But this first litigation did not last beyond a year. In 1833, it was settled by the party objecting giving way, paying for the past, and taking a license of new, which the patentees granted at the same rate as previously.

From 1833 to 1839, Mr. Neilson and his friends remained in the undisputed possession of the patent, and drew, from year to year, the profits of the invention, which, by 1839, appear to have amounted to many thousand pounds per annum.

But in 1839 the patent was again disturbed. During the interval the embers of the old litigation seem never to have been wholly extinguished; and they now broke out of new with greater force than before. The same parties appeared as objectors a second time; but, on this occasion, they were supported by several of the other Scotch iron-masters, who entered into a combination to defeat the patent. The objects of this powerful confederacy were embodied in a formal deed, executed in January 1840, which, from its novelty, is worthy of being preserved. It was in these formidable terms:—

“The subscribers hereto named and designed in the testing clause hereof, being all interested in the iron trade, and in opposing the enforcement of certain privileges alleged to have been conferred on James Beaumont Neilson, engineer in Glasgow, by letters patent, dated the

* Mr. John Condie, sometime manager at the Blair Iron Works, claims the merit both of introducing the improved tubular air-vessels, and the water twyre.

1st day of October 1828, and to be now vested in him and Charles Macintosh of Campsie, and John Wilson of Dundyvan, and the Trustees of the late Colin Dunlop of Tolcross, and of the claims founded by those parties on certain licenses or agreements between them and various of the subscribers, proceeding upon the said letters-patent, do hereby agree and bind themselves to institute, defend, carry on, and follow out to a conclusion, such actions, and generally to adopt such proceedings, judicial and extrajudicial, as Duncan M'Neill and Robert Whigham, Esquires, advocates, or the survivor of them, shall advise to be expedient and proper for setting aside the said letters-patent, and for resisting the enforcement of the claims founded by the said James Beaumont Neilson and others thereon, and on the said licenses or agreements, and for obtaining repetition of the sums paid by the subscribers in consequence thereof, and generally for challenging, opposing, and obtaining redress against the claims set up by the said James Beaumont Neilson and others, and that in the name of the subscribers, or any of them, or of any other parties as may be advised by the said Duncan M'Neill and Robert Whigham, or the survivor of them, and to pay the expense of all such proceedings, and to relieve any cautioners who may become bound; or, if required to become cautioners themselves, for preventing or removing any interdict which may be applied for by the said James Beaumont Neilson and others, against any of the subscribers, and, generally, to bear the whole consequences of opposing and resisting the claims of the said James Beaumont Neilson and others, all in proportion to the quantity of pig-iron made at the iron works of the subscribing parties respectively, during the continuance of the said proceedings; and they bind themselves severally to make no payments to, and to enter into no compromise or arrangement of any kind, with the said James Beaumont Neilson and others, excepting such as shall be approved of in writing, by at least so many of the subscribers as shall be the proprietors of a majority in number of the furnaces in blast at the time belonging to the whole body of the subscribers, and as shall be made upon terms common to all the subscribers; but the minority shall be obliged to enter into any arrangement made by such majority, on terms common to all; and it is hereby agreed that each of the subscribers may employ such agent in Edinburgh as he shall think fit, but that the said Duncan M'Neill and Robert Whigham, with such other counsel as they, or the majority of the said agents, may consider necessary, shall be the counsel employed in conducting the said proceedings; and in the event of any difference arising as to the meaning or effect of this agreement, or as to the apportionment of the liabilities hereby undertaken, the same is hereby referred to the said Duncan M'Neill and Robert Whigham, or the survivor of them, who shall have power to take such assistance in determining the same as they shall think fit, and whose decision shall be final.*

* When thus recording the names of the very able counsel selected by Mr. Neilson's opponents, it is right also to mention that the management of Mr. Neil-

facturers may be judged of from the fact, that the nett profits of one firm amounted, for the seven years from 31st May 1832 to 31st May 1839, to £214,800, 8s., or at the rate of £30,000 a year; and, for the year from 31st May 1839 to 31st May 1840, it had increased to £54,855, 1s. 5d.* Their profits since, and particularly at present, must be enormous.

The demand for iron is still on the increase, and appears to have reached the point when it has exceeded the present means of its supply. Owing to the immense number of railways in progress and in agitation, it is anticipated that about two millions of tons per annum will be required to be made during this and the next two years. Such a quantity cannot be calculated on. The supply will probably fall short of it by a quarter of a million; and the effect will be a great increase in the price of iron. But if this increase shall be the means of checking the universal and reckless speculation in railways that prevails amongst all classes—from the merchant of highest standing to the waiter in our country inn—none need regret although prices are doubled or tripled for a time. It will be the most natural check that can be applied, and much more effectual than any legislative measures on the subject.

But, amid the blazing of the iron-furnaces, the improvements that have been introduced into the manufacture, the profits that are derived from it in all quarters, and the whirl of speculation in which we are involved, we are apt to overlook the condition of the colliers and miners, upon whose labour all is dependent.

"These subterranean labourers pursue, with incessant toil, their invaluable occupation. A shaft is sunk, wide excavations are opened up, and tier above tier are formed at various depths below the surface of the earth; and sometimes below the bed of a river, or of the ocean itself, a succession of extensive streets are seen to penetrate the bowels of the earth: so that, in a tract of country which for ages may have been regarded as an unproductive waste, numerous villages, with their busy throng of inhabitants, find an existence which would never have been theirs but for the fruitful source of wealth that is yielded by the coal (and iron) mines. And thus it happens in many parts of this industrious and enterprising country, that a dense population are making the bosom of the earth to resound with the pickaxe below, while the surface is opened by the plough above, or, it may be, is furrowed by the rapid keels which bear abroad the commerce of Great Britain."†

In Scotland, the mining population here referred to has long been in the most degraded condition. Prior to 1775 the colliers were, by the common law of Scotland, in a state of slavery.

* Evidence in Baird's Trial.

† Dr. Colquhoun.

They, and their wives and children, were the property of their master, and were transferrable with the coal-work in the same way as the slaves on a West India estate were—(till the Abolition Act was passed,)—transferrable on a sale of the estate. This state of things was changed in 1775, by an Act which declared them “free,” and found them entitled to “enjoy the same privileges, rights and immunities, with the rest of his Majesty’s subjects.” But the spirit of the Act was destroyed by its restrictions and regulations; and, in 1799, another statute had to be passed, enacting that “all the colliers in Scotland shall be free from their servitude.”

This legal manumission, however desirable as a preliminary, could not produce social reformation; and, as no ameliorating measures followed to elevate the moral and educational position of the miner, he remained substantially the same man when free that he was when a slave; and he still continues, in a great measure, unchanged. The mining population of Coatbridge, the focus of the Lanarkshire works, is thus described by Mr. Tancred in his Report to the Childrens’ Employment Commissioners, dated 31st July 1841:—

“At Coatbridge, where a large portion of this population has been located within the last ten years, no church or clergyman has been supplied them till very recently, when a church was erected, chiefly at the expense of one out of the numerous employers of labour in the district. There is also a Relief Church, provided also by voluntary contributions. These efforts come, of course—as must always be the case so long as things of this importance are left, as now, to accident and chance—too late. In the meanwhile, a population has been growing up, immersed more deeply than any I have met with in the most disgusting habits of debauchery. I feel that my powers of description are wholly inadequate to convey the feeling inspired by a visit to these localities. The able report of Mr. Tremeneere upon the state of the districts about Newport, in South Wales, in which the Chartist riots broke out, would apply not inaptly to the state of things about Coatbridge and Airdrie. Every thing that meets the eye or ear tells of slavish labour united to brutal intemperance. At night, ascending to the hill on which the Established Church stands, the groups of blast-furnaces on all sides might be imagined to be blazing volcanoes, at most of which the smelting is continued Sundays and week days, by day and night, without intermission. By day a perpetual steam arises from the whole length of the canal, where it receives the waste water from the blast engines on both sides of it; and railroads, traversed by long trains of waggons drawn by locomotive engines, intersect the country in all directions, and are the cause of frequent accidents, into which, by the law of Scotland, no inquiry is made.”

Since 1841, in consequence of the deplorable picture which the Commissioners’ Report disclosed, a great legislative improve-

ment has been introduced, whereby all females are prohibited from working in coal or ironstone mines; thus securing to the rising generation the *opportunity* of maternal care which they did not previously enjoy. And, owing to the exertions of Mr. Tremenheere, the Inspector appointed under the Act, its provisions are in course of being vigorously enforced.

But no mere legislative enactments will cure the social evils that exist in the mining districts. The true remedy is to be found in a proper relation being established betwixt the "employer" and the "employed;"* and to this object Mr. Tremenheere, who is evidently a most superior man, has been directing his energies.

The work is a difficult one to accomplish, owing to the miner's entire want of training. What may be the state of the next generation, after the recent legislative measures have had time to operate, no one can tell. But the miner of the existing generation is a sad instance of the effects of neglect. Scarcely was he born before he was removed from the charge of his mother (who returned to her work in the collieries,) and intrusted to the care of a stranger. There was no room, therefore, for the exercise of the parental affections. At the age of five, six, or seven, the child was sent into the pits, and employed as a "trapper" in the dull and monotonous duty of opening and shutting the doors which regulate the ventilation of the mines. When he was a few years older, he was advanced to the post of dragging, by a chain attached to his leg, or by pushing before him, the trucks of coal from the place where it is wrought to the bottom of the shaft. By fourteen, he was a "half man," employed in assisting the working colliers; and at the age of seventeen or eighteen, he was invested with the full status of a collier or miner. By the age of forty-five, he is an old man, scarcely fit for his laborious occupation.

Add to all this that his labour is underground—that he begins his work at four in the morning—has no regular hours for meals—no comfortable home—no correct notion of personal cleanliness†

* An admirable little tract, with this title, written in a calm and kindly spirit, was published, some time since, by the Messrs. Chambers; but such is the ignorance and prejudice of the miners, that they will not read it with temper, and they universally denounce its simple truths.

† "By the strange infatuation of a deep-rooted and nearly universal prejudice, the collier believes that it weakens him to wash his back. The consequence is, that not one collier in 500 ever washes his whole person, unless he may chance to have opportunities of bathing in summer, to which, by the bye, he does not attribute any ill effects, though he fears injury from his using water to his back in the common process of washing. The collier, as a general rule, when he comes home from his day's labour, as black from head to foot as the coal he has been working, sits down on a stool before the fire and washes his face, neck, and breast, his arms and his shoulders, and his legs up to his knees—often not so far; he washes his head on Saturdays. The whole of the rest of his person remains untouched by water. I found, during casual visits to their cottages from time to time, after the hours of

—and is liable every day to be carried off by a thousand accidents*—and who will wonder that he is destitute of education, of reflection, and of provident habits,—ignorant of the relation betwixt wages and capital—despotic in his control over the free labour of his fellow-workmen—easily duped into combinations and strikes,—and the creature of sensuality and intoxication!

It makes one shudder to contemplate a manufacturing population composed of such individuals. Their underground occupation removes them from all association and sympathy with other classes of labourers. They constitute a separate class of their own; and the frequent disturbances in the mining districts show, that unless great improvements take place, we have a volcano in our social system, which, did its full force break out,

labour, some hundreds of men in the act of washing; the backs of every one of them were quite black, and every one gave the same reason, in the same words, for not washing his back, namely, 'that it would weaken it.'—*TREMENHEERE'S Report*, 1844.

* The accidents in the mines of Great Britain occasion about 2500 deaths in a year. At every explosion from 1743 to 1845, there have been, on an average, 13 lives lost. The *Mining Journal* keeps a weekly record of these accidents; and the following is its catalogue for a week, taken at random, in February last:—

" MINE ACCIDENTS.

" *Bent Grange, Oldham.*—H. Stochley was killed from injuries of the spine, caused by an unnecessarily rapid winding of a carriage, which was pulled over him. At the same colliery, (belonging to T. Butterworth, Esq.) J. Spurr got into so narrow a passage, that a waggon in passing, crushed him to death.

" *Ilkston, Derbyshire.*—P. Bostock was killed by part of the workings falling on him in a colliery in which he was employed.

" *Coltess Iron Company, near Shotts.*—As three men and a boy were descending one of this Company's pits, the belt chain caught hold of the bucket, and upset it, precipitating them all to the bottom. The men were killed, but the boy was miraculously saved.

" *Longton, Staffordshire.*—As W. Hannaby (eleven years of age) was pushing a corfe to the mouth of the pit, to be lowered into the mine, it got beyond his control, when both fell down the shaft, ninety yards deep. The boy was killed.

" *Ballswooden Mine.*—A large 'scale' of ground fell on and seriously injured T. Leggo, while at work.

" *Wyndham Pit, Cleator Moor.*—D. Lash and J. Wilkinson have died from the effects of injuries received by an explosion at this pit.

" *Plean Colliery, Stirling.*—As D. Forsyth and his son were undermining a large piece of coal, it suddenly parted from the roof, and falling upon the son, killed him in the presence of his father.

" *Wood's ad Lead Mines.*—A poor boy, named Murray, fell down a sump, thirty-six feet deep, and was seriously injured.

" *Thistleyfield, Butterworth, Lancashire.*—Two young men were killed while employed in a coal-pit.

" *Fygrove Colliery, Middleton.*—As three brothers were descending Messrs. Knowles's pit, Milnmo, in consequence of the head stocks giving way, they came in contact with an ascending tub, and were thrown out, two being killed.

" *Maryam Colliery, near Pyle.*—An explosion of fire-damp took place here yesterday week, but the men, with one exception, fortunately escaped, by throwing themselves upon their faces into the water running through the works. J. Jones, being more exposed than the rest, was much burned by the ignited damp."

could be restrained neither by reason nor law, and might materially disturb the framework of society.

These improvements the Legislature are wisely encouraging. But it is with the capitalists—the employers—that the responsibility must rest of carrying them fully out. Were the capitalists joint-stock companies, we would expect to meet with difficulties in doing this; but it should be different with private individuals, who can devise and carry out their plans unfettered; and almost the whole mining works of the country are in the hands of private individuals.

The improvements necessary will be seen from a perusal of the Commissioners' Reports, and the evidence appended. We have no space at present to analyze these valuable documents; but the following occur to our recollection as some of the most useful suggestions:—

(1.) The masters should abolish the truck system, and give fair effect to the Act which prohibits it. It is well known that in few instances have they done so; and although the reasons given for its continuance are plausible (such as the distance of works from markets, &c.) it is a sufficient answer that the Legislature, after due investigation, considered the system bad as a whole, and passed a law prohibiting it. Any evasion of that statute leads the miners to suppose that, while laws can be enforced to the letter where he is concerned, it is otherwise with the rich. Such an idea will be removed from his mind by the master carrying out the provisions of the Truck Act.

(2.) The iron furnace should not be blown upon Sundays, except in so far as absolutely necessary. This has been successfully tried at many works, and the change has been beneficial in the district around.

(3.) The schools and churches which many of the iron-masters are establishing in their districts, should have teachers and clergymen not merely of high attainments, but of enthusiastic dispositions, whose ardour will lead them to leave no effort untried for the amelioration and improvement of the population;—and the masters or their managers should personally take an interest in the schools, by visiting them statedly, and in other ways.

(4.) The construction, ventilation, and cleanliness of the dwellings of the miners is the next important point; and its beneficial effect will best be seen by reference to the state of matters, in that respect, at a colliery in Ayrshire.

“The colliery in question is that of the Duke of Portland, about a mile and a-half from Kilmarnock, Ayrshire. It has been in existence many years, and has, for the last forty years, been under one management—that of Mr. Guthrie of Mount, his Grace's agent. It

employs about 120 families of colliers. These, instead of being crowded together in long rows of cottages, of fifty or sixty each (where the contamination of bad example quickly spreads to the whole, and the difficulties of the well disposed in keeping their homes neat, and their children clean and well behaved, are increased), are separated in groups of five or six houses at a distance of three or four hundred yards from each other, each with its plot of garden-ground. No dogs or poultry are allowed to be kept, and other arrangements are made for comfort, propriety, and cleanliness, around the houses. Where so few are collected together, there is obviously a better chance of order and harmony, and a mutual regard for each other's convenience and comfort. Things offensive to the feelings and habits of the best among them are more easily kept down, and what is reasonable and judicious is more readily established by the force of a sound public opinion. Substantial comfort, order and cleanliness, prevailed within and around these cottages."*

Such neatness and tidiness in the cottages of the workmen will aid also in promoting habits of personal cleanliness, which should be encouraged by providing abundant supplies of water conveniently situated.

(5.) Another great point would be, to extend the contracts with the workmen, and the period of occupation of their dwellings, beyond a fortnight or a month, which is the general period, to six months or a twelvemonth. At present, the workman is liable to be turned adrift, without work or house, upon fourteen days' or a month's warning. He is, therefore, constantly unsettled. But, by engaging him for a longer period, his habits would become more settled, and he would be more open to suggestions for his improvement.

(6.) Every thing should be done to prevent accidents in mines, and to take away the notion from the workman that nobody cares for him—a notion that is not without foundation, when a coal-master could say, without emotion, that it was of no consequence how many workmen were killed, as he could get plenty of others.

(7.) No exertion should be spared to introduce and encourage savings' banks, benefit societies, libraries, reading-rooms, and other such institutions, into the mining districts, so as to foster habits of providence and intelligence.

And, finally, the spirit in which all of these improvements would require to be set agoing or carried on, should, in Mr. Tremenheere's words, be a "course of kind, forbearing, paternal, and generous treatment," on the part of the masters, "thus uniting their people to themselves in the bonds of mutual confidence and good will."

* TANCRED'S *Report*, 1845.

ART. VI.—*Hand-Book for Travellers in Spain, and Readers at Home.* By RICHARD FORD. London, 1845.

MADRID, as Mr. Ford informs us, may now be reached in six days from London. But although political events occurring in Spain are rapidly transmitted to our Journals, and we have long had frequent intercourse with the principal Spanish seaports, it will surprise any reader of the interesting work before us to perceive, how very little is really understood in Britain of the true condition of the interior of the kingdom. "Spain is a *terra incognita* to naturalists, geologists, and every other branch of *ists* and *ologists*," says Mr. Ford (p. 77); and it may be added, that the actual state of the country has hitherto remained too much unknown, except in the most superficial manner, to the public of this kingdom.

Some of the causes which have produced this result are sufficiently obvious, and will be hereafter adverted to; but, assuredly, the absence of attractive interest cannot be ranked among these causes. There are few, if any, countries which more deserve attention than Spain, whether in respect to her past history, her present state of transition, or her future career. Possessed, in a remarkable degree, of the elements of national strength and greatness, Spain rose, after many struggles and much noble effort, to be for a time the arbitress among the nations both of the Old World and the New. But, speedily passing her zenith, she has now been descending, through successive centuries, with brief respite, from one stage of decline to another, until little else remains for the present but the Shade of a mighty Name. Decay is within her cities, and the desert among her plains—her highways are unfrequented and lonely—those great ports and naval arsenals, which furnished forth magnificent fleets from the days of the Armada to those of Trafalgar, are now almost, or altogether, without one solitary ship of war—and those soldiers who conquered at the Garigliano, and Pavia, and St. Quintin, or won kingdoms under Cortes and Pizarro, have been succeeded by the modern armies which fled before the French invaders of their country, with a facility that stripped even victory of its renown.

So melancholy a change in the fate of a great nation, it is profoundly affecting to contemplate; and all the more so, as it is borne with an apparent patience and resignation, which, had they been free from the taint of a too submissive indolence, would have lent something like dignity even to decline.

The true cause of the flow and ebb of Spanish greatness is

written, in obvious characters, in her history; it is fraught with instruction, and may be expressed in few words. Spain arose in the day of her freedom; from the hour when her civil and religious liberties were subverted, she has decayed: and her regeneration will only be assured from the date when those liberties shall once again be restored.

Under the consecutive reigns of Ferdinand and Isabella, Charles V., and Philip II., the outward grandeur of Spain was at its height. But it was in the same period that the seeds were surely sown of all her after decline. It was then that the powers of the nobility were broken, and the liberties of the people undermined. It was then that religious freedom was destroyed, and the modern Inquisition struck its roots deep into the heart of Spain. Of these two great evils, civil and religious despotism, acting with redoubled energy when combined, it is perhaps to the latter, working through the Inquisition, that the greater share of the modern decline of Spain may justly be ascribed. It was not the impious or the criminal, who was the object of hostility to the Inquisition. The great enemy which, with the instinct of self-preservation, it knew and hunted down, was the man who dared to assert the sacred right of freedom of conscience. With all its extensive organization for tracing and securing whomsoever was denounced as suspect—with its nefarious and stealthy procedure, basely contrived to take an unseen aim, and strike when least suspected—appealing to abject superstition, or to craven fear, as the human passions on which it had to work, and sapping the very foundations of society by sowing distrust between spouses, or infusing treachery into the breast of parent and child—the Inquisition spread its poison through the veins of the social system. And thus at length, working along with civil tyranny, it produced an utter prostration in the minds of all classes of the people, who found their only safety to consist in the abject surrender of freedom of thought and conscience to the Holy Office, as they had surrendered their whole temporal freedom to the king. It has been well observed, that the Inquisition presented “the most effectual barrier, probably, that was ever opposed to the progress of knowledge;” and that “the moral influence of this tribunal, eating like a pestilent canker into the heart of the monarchy, at the very time when it was exhibiting a most goodly promise, left it at length a bare and sapless trunk.”*

It would have been interesting, had our limits permitted, to trace in some detail the present degenerate state of Spain, both

* Prescott's *Ferd. and Isab.* i., 332, 333. See also Dunlop's *Mem. of Spain*, i., 12, and ii., 337.

morally and physically, to its true root, the extinction of civil and religious freedom. But we must now proceed to some analysis of the work before us, and have only been led into these prefatory observations, because the condition of that country incessantly forces upon the reader of Mr. Ford's work the inquiry, to what cause her mournful reverse of fortune is to be attributed; and the present position of Spain adds a double attraction to every such inquiry.

The "*Hand-Book*" purports to describe "the country and cities; the natives and their manners; the antiquities, religion, legends, fine arts, literature, sports, and gastronomy," of Spain; and at the same time to give notices of Spanish history. It is evident from this enumeration, that the subjects embraced by it are too varied and extensive to be exhausted in two duodecimos. But on each of these subjects, a store of valuable information, "the fruit of many years' wandering in the Peninsula," will be found. The work embraces a range of topics, from the imposing palace of "the vasty Escorial," down to the public kitchen of the humble *venta*, with its blackened walls, its range of pots and pipkins, and the sorry national cookery which smote the gastronomic stomachs of the French invaders with dismay. "A country with thousands of priests, and never a cook!" was the emphatic expression of the Frenchman's horror when he seized and occupied Spain.

To the traveller in Spain, such a work as the *Hand-Book* was previously a great desideratum; and by the reader at home it will be found to contain much both of instruction and entertainment.

Mr. Ford has consulted almost every variety of taste which is likely to be found among the different classes of travellers. For the sportsman, and especially the angler, a tour of the highest attraction is sketched, and numerous notices are incidentally given of "virgin, unwhipped streams, which would make old Izaak Walton's mouth water," (p. 687); and which will be found not a little tempting, by the modern lovers of "the gentle sport." If, again, the traveller be an admirer of the fine arts, or fond of legendary lore, or an antiquarian, or a geologist; or, in fine, if he propose to himself almost any other peculiar path of investigation, he will find a separate tour arranged which is specially adapted for his gratification.

So great a variety of subjects creates a difficulty in selecting what may best be brought under the more particular notice of our readers. At first, the numerous localities which are interesting, as connected with some of the more salient points of Spanish history, seemed to claim a preferable regard. Such, for instance, are the cave of Pelayo, in the Asturias, the

cradle of the Gotho-Spanish monarchy, (p. 710); and the bridge of Pinós in Granada, the spot where Columbus was overtaken by the messengers of Isabella, and once more brought back to her Court, after he had left it in disgust, and was thus far on his way to carry to another kingdom the proffered discovery of a new world, (p. 328.) Such, also, is Argamasilla del Alba, in Andalucía, in the prison of which Don Quixote was composed, (p. 310): and such the pass in the desert heights near Almendin, still termed *El ultimo suspiro del Moro*, where the unhappy Boabdil, *el chico rey*, the last of the Moorish kings of Granada, took his farewell gaze at his home of the Alhambra, when wending his way in tears to exile in the Alpujarras. It was then that, according to the well known tradition, his mother, Ayesah, addressed him: "thou dost well to weep like a woman, for that which thou hast not defended like a man," (p. 396.) Bitter, indeed, might the tears of the dethroned monarch have been, could he then have foreseen his posterity reduced to subsist on the alms which they begged at the mosque-doors in Fez!

But it would be too long to enumerate even a very few of the interesting localities in Spain, which would have pre-eminently claimed attention, had it been our purpose to make a selection of these from the Hand-Book. We shall, therefore, advert only to one other, the convent of St. Yuste, in Estremadura, which was the last retreat of Charles V., after he had resigned the throne, and which witnessed his strange proceeding, of having his own obsequies celebrated in his lifetime, when he caused himself to be laid in the coffin, and the service for the dead to be chanted over him. This curious act of mortification and penance, dictated by the feebleness of a mind impaired by severe illness, and haunted by superstitious fear, is discredited by Mr. Ford, (p. 552) apparently because it was not among any of the traditions of the monks whom he found at St. Yuste. But the statement of Robertson, and the authorities on which he relies, are not to be so lightly set aside.*

Giving up the design of noticing mere localities, however attractive from historical associations, it seemed most desirable to attempt to exhibit something of the actual condition of Spain and its people, as illustrated in Mr. Ford's work, that being always a matter of deep interest, and peculiarly so at the present moment.

In entering on this subject, even the most careless observer must be struck at the threshold with the want of vital union and reciprocal feeling, which exists between the several provinces of

* ROBERTSON'S *Charles V.*, Book 12.

Spain, to so great a degree as to render the national body politic rather a conglomerate of minor kingdoms, than one consolidated kingdom in itself. The provinces are, in many instances, physically separated from each other by the great mountain ranges which traverse the country, and the deficiency of inter-provincial communication by good roads. But they appear to have been equally kept asunder by the social and moral barriers, arising from prejudices, rivalries, habits, and modes of life, which, originating at an early period, have for ages been stereotyped in the several localities of Spain.

It is one result of this state of affairs, that a just view of the country cannot be taken without paying regard to the more prominent peculiarities of the several provinces, and combining this with the consideration of those subjects which are of a national character and pervade the kingdom generally. Either of these two classes of topics, the provincial or the national, if fully treated, would far more than exhaust our limits. But we shall endeavour first to give a short sketch of some of the characteristics of a few of the provinces, and then to consider some interesting particulars affecting the kingdom at large. Undoubtedly, any such attempt can be but imperfectly executed in the brief space to which it must be confined; and there are other modes of treating the work before us, which might, in various respects, be more attractive; but none appears, on the whole, so well adapted to attain the great object of elucidating, in some degree, the present condition of the Spanish nation.

Andalucía, however important, is more familiar to British readers than many of the other provinces of Spain. Merely commending to attention the account which is given in the Hand-Book, of Seville and its celebrated cathedral—Cordova and its Mezquita—and Granada, with the Alhambra, we shall pass to other provinces less commonly explored. But it may be noticed, in doing so, as characteristic of the state of Spain, that in Andalucía vast tracts exist of land, once cultivated and populous, now mere tenantless prairies, *dehesas y despobladas*; but evincing that they retain all their former fertility, by their "brilliant Flora, which is that of a hot-house growing wild. Flowers of every colour, like perfumed cups of rubies, amethysts, and topazes, filled with sunshine, tempt the stranger at every step."—P. 148.

Very different are the soil and climate of the "kingdom" of Galicia—though even there, in the warmer districts, such as the lower valleys of the Minho, the vine, the olive, and the orange abound. But, generally speaking, the country is mountainous, and the climate temperate and rainy. Galicia is well adapted for rearing any quantity of cattle; and to Englishmen the remark of Mr. Ford is interesting, that under our late tariff there is a

probability that this district will afford an increasing supply of live stock to the markets of Britain.

Galicia enjoys the unenviable distinction of being regarded as the Bœotia of the north-west of Spain. Its interior is comparatively unknown to the bulk of Spaniards themselves. Its hills provide a race of porters to both Spain and Portugal, somewhat as the Scottish Highlands used to furnish a tribe of caddies to their metropolis. Benighted ignorance, as usual, characterizes the peasants; though Compostella, the star-paved city of St. Iago, the tutelar saint of Spain, is in Galicia. Gross indeed must the superstition be, which devoutly believes in the well-known legend of St. Iago's voyage from Joppa to Galicia in seven days, after his head was cut off, steering himself all the way, in a boat of stone. But the existence of such credulity and infatuation is unfortunately not a provincial peculiarity, but a national trait; as fabulous legends, supported by forged miracles, have long superseded the Bible in many parts of Spain, and have proved a source of great wealth, and equal disgrace, to the Roman Catholic Church in that kingdom.

In Galicia the cottages are infested with vermin; and this also, by the way, appears to be a national, rather than a provincial characteristic. They are "full of dirt, smoke, and damp," and "the same room does for nursery, stable, kitchen, pig-stye, parlour, and all." The women often "do all the drudgery at home, in house and field," even labouring at the plough. They are never idle; and "the *Rueca*, or distaff, is part and parcel of a Gallega, as is a fan of an Andaluça." The men are a fine race, physically speaking, but they proved a sorry set of soldiers in the Peninsular campaigns. They speak a strange patois, with a "half singing, half whining accent," and containing a "confused jumble of words from many languages, but chiefly from the Spanish and Portuguese."* It is unintelligible to Spaniards in general—"cependant, les Galliciens s'entendent entre eux." It would appear that the Gallegos are proverbially notorious as the most obstinate litigants in all Spain.—P. 648.

"The country," says Mr. Ford, "is not infested with robbers, for there are few travellers, and the Galicians pilfer rather in kitchens than on the highway." But whoever reads Borrow's amusing journey in Galicia, will find that even this very moderate amount of comparative praise, requires to be taken with considerable qualification.

Passing now, with Mr. Ford, into the adjoining "kingdom" of Leon, it appears to be peopled by a race of hardy, ill-educated agriculturists, who are backward enough to plough still in the

* Borrow's *Bible in Spain*, c. 25.

classical fashion "of Triptolemus and the Georgics." They are animated with a more kindly feeling towards the British, however, than most of their countrymen, and generally possess an honest simplicity of character. The practice of riding down cattle with the lasso still exists here as it does among their descendants in South America.

The dresses of Spaniards in general are often highly picturesque, varying from province to province, and they are minutely and curiously described in the *Hand-Book*. In Leon, although it appears that the people frequently dwell in mud hovels, and are in a miserable condition, yet "the peasant's dress near Ciudad Rodrigo and Salamanca, is peculiar and expensive; his Sunday costume is worth more than that of all the peers who attend early service at Whitehall chapel." For the details of this gay dress, and the corresponding dress of the female peasant (the *Charro y Charra* of the district,) we must refer to our author.—P. 559.

In Leon, around Astorga, are the Maragatos, "perhaps the most singular caste," says Borrow, "to be found amongst the chequered population of Spain. They have their own peculiar customs and dress, and never intermarry with Spaniards. Their name is a clue to their origin, as it signifies Moorish-Goths, and at the present day their garb differs but little from that of the Moors of Barbary. They are a nation of *arrieros*, or carriers, and almost esteem it a disgrace to follow any other profession."* Their fidelity to their trust is such that they will protect the goods confided to them at the hazard of their lives; and thus, although they charge much higher rates than others of the trade, "almost the entire commerce of nearly one-half of Spain passes through their hands."† Referring for fuller details of this curious race to our author and Mr. Borrow, it may serve as a sample of their singularities to be informed, that "the whole tribe assembles twice a-year at Astorga, at the feasts of Corpus and the Ascension, when they dance *El Canizo*, beginning at two o'clock in the afternoon, and ending precisely at three. If any one, not a Maragato, joins, they all leave off immediately."—P. 594.

Leaving the Leonese, it appears that in Estremadura, both Upper and Lower, there are vast districts of fertile land where the finest wheat might be raised in inexhaustible quantities, but which are abandoned to sheep walks. Under the Romans and the Moors, this province was both a granary and a garden; and it is still called by the Gipsies—that singular race which pretty strongly flavours the population of several provinces in Spain—*Chin del Manro*, the land of corn. The cities of Estremadura "are few and dull; their roads are made by sheep, not men; and their inns are mere stables for beasts," (p. 516.) The *Estre-*

* BORROW'S *Bible in Spain*, c. 23.

† Ibid.

menos are simple, kind-hearted, and contented. The chief stock of the province is sheep, and the famous merino sheep are here. The term merino, by the way, "is said to be derived from *marino*, because the original breed of sheep was imported by sea from England" in the time of Henry II. (P. 517.) Large flocks of sheep, containing 10,000 in each, have their summer quarters in the higher districts of the province, and come down to the plains in winter. Some of these flocks travel over a distance of 150 leagues; and a free sheep walk, 90 paces wide, is kept for them on each side of the highway "which entirely prevents enclosure and good husbandry." The fleece of the sheep which migrate is finer than that of those which are kept stationary. The flesh is inferior, "as no Estremenian ever has dreamed of putting a Merino fleece on a Southdown carcase." The listless shepherds, says Mr. Ford, laconically, "are mere brutes, like the animals with whom they live, and in whose skins they are clothed." But their avocation is more popular than that of tillage, which requires fixed residence, foresight, some machinery, and much steady labour—all which is escaped by the man who spends his life in wandering after sheep.

Estremadura is famous for its swine, which find food with ease in those woods of oak, beech, and chestnut which cover great districts of the province.

"The pigs are turned out in legions from the villages, which more correctly may be termed coalitions of pig-styes; they return from the woods at night, and of their own accord, like the cattle of Juno. (*Livy*, 243.) On entering the hamlet, all set off at a full gallop, in a handicap for home, into which each single pig returns, never making a mistake; there he is welcomed like a prodigal son or a domestic father."

The hams and sausages of Estremadura have always been celebrated, and well they may, if they actually perform the feat of inspiring the imagination of the poets who devour them. As to this, it is said by the biographer of the great Lope de Vega, that he "never could write poetry unless inspired by a rasher."

Estremadura has but a scanty population.

"Sheep, pigs, locusts, and doves, for hours and days, will be the only living things which the traveller will see in these *despobladas*. You may ride for leagues without meeting a human being."

The scarcity of men, however, is productive of one advantage:

"The roads are solitary and safe; where there are no travellers except sheep, why should there be robbers?"

The following remarkable sketch of the natives of Estremadura, though somewhat melancholy light, not merely on that province, but on the portion of the whole of Spain:—

menos live, in their isolated province, like the Murcians, in communication with the rest of mankind; here the moral

and material obstacles to the prosperity of Spain are painfully exemplified; ignorance, indolence, and insecurity, combine with poverty and an absence of small proprietors; here is alike a want of fixed capital in the landlord as of circulating capital in the tenant. The backward population is indifferent even to amelioration."

Most cordially do we concur in the remark of our author, that,

"Bad government, civil and religious, was the real cause of this abomination of desolation, which all who run in Estremadura may read; but this people always loves to look for causes from *without* of those failures which are the necessary results of causes *within*."—P. 516.

The two Castiles, Old and New, form a large portion of "the central plateau of Spain, of which they are truly *el Cora y Castilla*, the heart and citadel. The Castilians have a singular antipathy to trees, and, like Orientals, they seldom plant any except those which bear fruit, or give shelter for their *alamedas*." Water is very scarce, and fuel and timber are dear. "Nature and man are alike adust and tawny; everything is brown, his house, his jacket, his wife, and his ass." Amid the finest wheat districts in the world, which yield a great return, "even with an agriculture slovenly as that in Barbary," the peasantry are in a state of poverty and ignorance. There are not many isolated farms, "as a general insecurity forces men to congregate for mutual protection." The cottages of the few hamlets which exist, are often built of mud, or bricks dried in the sun, and the openings for windows are without glass. So little energy or resource appears to exist in the people, that, in some instances, ever since the French invaders tore off the roofs of their cottages for camp fires, and the uncovered walls became decomposed by the rain, the huts have not been rebuilt. Thus,

"Many agricultural families, especially about Ocana, as near Guadix, burrow in the hill sides, and live in holes fitter for beasts than men. The labour of the inmates is increased by the distance of their residence from their work: they have to start long before daybreak, and return weary as their cattle after nightfall. Generally speaking, both man, woman, and child, are overworked in the fields of Spain, where human bone and sinew supply the want of the commonest machinery; yet, from knowing no better, the Castilian does not complain, nay, the peasants among themselves are as fond of amusement as children, and full of raillery, mother-wit, and practical joking."—P. 718.

The pride and *Espanolismo* of the Castilian, have long been proverbial. "All feel equal to the proudest noble through their common birth-right of being Castilians." They have many good qualities; they are not addicted to low degrading vices; and although "proud, obstinate, ignorant, prejudiced, superstitious, and uncommercial," yet, on the whole, Mr. Ford thinks they "contain the virility, vitality, and heart of the nation, and the

sound stuff of which it is to be reconstructed." With all this, it is a striking characteristic of the state of Spain, when it is stated by way of comparative praise, that "the *Castellano* is *less* addicted to murder and treachery than the irritable native of the south and south-east provinces."—P. 719.

Our limited space will prevent us from making any further extracts of a strictly provincial character; and in proceeding to notice some of those features in the condition of Spain which are common to the kingdom at large, it is striking, as already remarked, to observe the state of decay of many of the towns and cities, contrasted with their former splendour. Cordova, we are told, in the 10th century, under the Moors, "had nearly a million of inhabitants." It has now a population "under 60,000, or as some say, and probably correctly, 45,000," (p. 296.) The old imperial city of Toledo, "the widowed capital of two dynasties," which is said to have formerly had a population of 200,000, only contains now about 15,000 inhabitants. It is "a place of palaces without princes, convents without monks, and *exclaustrados* without bread," (p. 840). And a town of more modern greatness, El Ferrol, "like La Carraca and Cartagena, is a sad emblem of Spain herself; the population has dwindled down to some 13,000, and is poverty-stricken and unemployed. It is the silence and decay of the church-yard, not the bustle and vigour of the dock-yard, in which, in 1760, 50,000 men toiled, and where in 1752, 55 men of war floated." Now there would appear to be left but two line-of-battle ships, "little better than wrecks."

In some cases, as in that of Cordova, an attempt may be made to explain this decline, by referring to the wars with the Moors, and the overthrow of their empire, involving with it the fate of their chief cities; in others, as in that of Toledo, by referring to the caprice of Charles V., a Fleming and foreigner, who gave all the court patronage to the "upstart" capital of Madrid; or, in other cases, as that of Ferrol, by referring to the extinction of the Spanish navy. But all these explanations rather serve to describe the fate of the country, than to account for its failure to repair losses, or bear changes, similar to those which, in other countries, have been repaired or compensated, by the energies of the people.

It would be foreign to the purpose of our commentaries on the *Hand-Book*, to advert to any of the great public buildings of Spain, merely as such; though Mr. Ford has collected much curious matter respecting many of these. But there is one of these structures, so peculiar in its origin and design, that it possesses interest as an exponent of the national character at the period when it was built; and, therefore, though its history is

well known, we may be excused for briefly noticing it. We refer to the immense fabric reared by Philip II., who has thence been occasionally termed *El Escorialense* as the founder of the Escorial.

Philip is well described by Mr. Ford as "cold, phlegmatic, suspicious, timid, and arbitrary,—a type of Spain in the 16th century, and a despot in politics and polemics." On account of the great victory of St. Quintin, which was gained over the French in 1557, on the day consecrated to the Aragonese Saint Lorenzo, the grateful monarch vowed to build a church, a monastery, and a palace, in honour of that saint and martyr. He resolved on combining all these in one great edifice; and as Saint Lorenzo, according to tradition, had been roasted to death on a gridiron, Philip enjoined the architect of the Escorial to plan the edifice, so that it should take the shape of the instrument of the Saint's martyrdom. It may be conceived how severely the ingenuity of the artist must have been taxed by the royal mandate, and how nearly he must himself have suffered, as it were, a second martyrdom, upon the grand architectural gridiron which was to hand down his own professional fame to posterity. But he executed his task. The interior of a great rectangular parallelogram, 744 feet by 580, "is divided," we are informed, "into courts, which represent the intersections of the bars of a gridiron, while the handle forms the royal residence; the feet are supplied by the four towers at the corners," (p. 811.) On the erection of this untoward structure did Philip, for more than twenty years, lavish immense sums of money annually, until, notwithstanding the defects of its design, the vast and sombre pile became imposing from its grandeur, and was long regarded as the most magnificent palace in Europe. It now remains the gloomy memorial of a dark and bigoted age: but a memorial which unfortunately has been ever too much in harmony with the spirit of the successive generations of Spaniards, which have come and gone since the day when it was founded.

Proceeding according to the plan already mentioned, with the notice of a few of the more interesting particulars respecting the social condition of the Spanish kingdom, as detailed in the *Hand-Book*, one of the first subjects of national importance there treated, is the state of the roads and conveyances in Spain. The highways of a kingdom are the channels of internal communication, and, as it were, the arteries of the circulation of the social system. Their condition affords one very valuable test of the state of the country. We are accustomed in Britain to a national community, the members of which, from north to south, are blended and fused together, by railroad and steamer, in the most frequent and inti-

mate personal intercourse. We have intelligence daily radiated to and from the capital, and pervading the whole length and breadth of the kingdom; giving to all a common centre, and subjecting all to a common impulse. But in this, Spain is yet not far removed from the social antipodes of Britain. So great a source of national weakness, and so remarkable an impediment to national improvement, as this absence of easy and frequent internal communication, can scarcely receive too much attention, in forming an accurate estimate of the present state of the country.

The obstructions to internal intercourse in Spain are partly physical and partly moral. Both classes of obstruction are very fully illustrated by Mr. Ford.

It appears, from details which are sufficiently entertaining, but rather too long to be extracted, that mails and diligences are as yet established only on the principal high roads connected with Madrid: elsewhere, all who cannot ride must betake themselves to the antiquated and expensive *voiturier* system of locomotion. The carriage, or "real Spanish *coche de colleras*," is a huge cumbersome machine, drawn by six mules, and has undergone little change during the last two centuries. To this vehicle the mules are harnessed with ropes:—

"The tackle is laid out on the ground, and each beast is brought into his portion of the rigging. The start is always an important ceremony. When the team is harnessed, the *mayoral* (driver) gets all his skeins of ropes into his hand; the *zagal* (his helper or cad) his sash full of stones; the helpers at the *venta* (inn) their sticks; at a given signal, all fire a volley of words and blows at the team, which, once in motion, continues at a brisk pace, performing from twenty-five to thirty miles a day."

The functions of the *zagal* are sufficiently arduous.

"He runs by the side of the carriage, picks up stones to pelt the mules, ties and unties knots, and pours forth a volley of blows and oaths from the moment of starting to that of arrival. He sometimes is indulged with a ride by the side of the *mayoral* on the box, when he always uses the tail of the hind mule to pull himself up into his seat."

Observe, if the vehicle should meet a *mal passo*, and stick fast in the mud, "push it out *backwards*; the more you draw it forwards, the deeper you get into the mire," (p. 33.) The oaths which the drivers shower upon their cattle are "limited only by the extent of their anatomical, geographical, astronomical, and religious (!) knowledge; *un muletier à ce jeu vaut trois rois*."

In the nearly total absence of all river or canal navigation in Spain, such a state of travelling as that above described, on all but the principal high roads to Madrid, even after every allow-

ance is made for riding on horse or mule, affords a striking measure of the vast distance at which Spain is still left behind in even the most necessary elements of political and social organization. If any one can estimate the interval between the state of conveyance by railway and that by a *coche de colleras*—almost as great as the interval between a man-of-war and a canoe—he will have made one step in taking an estimate of the backward condition of modern Spain, and perhaps also in forming a desire to see the resources of that great country developed, to her own unspeakable gain, as well as that of the whole family of civilized nations.

But the moral obstacles to internal communication in Spain, are at least as remarkable as the physical, and one class of them is most painfully illustrative of the disorganized condition of the country. This will be found in Mr. Ford's chapter entitled "Robbers, and precautions against them," and exhibits to a painful extent a state of society bordering on dissolution:—

"Robbery in other countries has yielded to increased population, to more rapid and more frequent intercommunication. The distances in Spain are very great: the high-roads are few, and are carried through long leagues of uncultivated plains, '*dehesas*,'—through deserted towns, dispeopled districts, '*despobladas*,' a term more common in Spain, as in the East, than that of village is in England. Andaluçia is the most dangerous province, and it was always so. This arises from the nature of the country, from being the last scene of the Moorish struggle; [which dates, by the way, as far back as the close of the 15th century, and indicates a somewhat chronic state of this social disorder;] and now from being in the vicinity of Gibraltar, the great focus of *smuggling*, which prepares the raw material for a banditti.

"First and foremost come the '*ladrones*,' the robbers on a great scale; they are a regularly organized band, from eight to fourteen in number, well armed and mounted, and entirely under the command of one leader. These are the most formidable; and as they seldom attack any travellers except with overwhelming forces, and under circumstances of ambuscade and surprise, where everything is in their favour, resistance is generally useless, and can only lead to fatal accidents; it is better to submit at once to the summons, which will take no denial, of '*boca abajo*,' '*boca a tierra*,' 'down, mouth to the earth.' Those who are provided with such a sum of money as the robbers think according to their class of life, that they ought to carry about them, are very rarely ill-used; a frank, confident, and good-humoured surrender generally not only prevents any bad treatment, but secures even civility during the disagreeable operation: pistols and sabres are, after all, a poor defence, as Mr. Cribb said, compared to civil words and deeds. The Spaniard is by nature high-bred and a '*caballero*,' and responds to any appeal to qualities of which his nation has reason to be proud: notwithstanding these moral securities, if only by way of making assurance doubly sure, an Englishman will do well,

when travelling in exposed districts, to be provided with a bag containing fifty to one hundred dollars, which makes a handsome purse, feels heavy in the hand, and is that sort of amount which the Spanish brigand thinks a native of this proverbially rich country ought to have with him on his travels. He has a remarkable tact in estimating from the look of an individual, his equipage, &c., how much ready money it is befitting his condition for him to have about him; if the sum should not be enough, he resents severely the depriving him of the regular spoil, to which he considers himself entitled by the long-established usage of the high-road. The traveller who is unprovided altogether with cash is generally made a severe example of, *pour encourager les autres*, either by beating, '*echandole palos*,' or by stripping to the skin, '*dejandole en cueros*,' after the fashion of the thieves of old, near Jericho. The traveller should be particularly careful to have a watch of some kind—one with a gaudy gilt chain and seals, is the best suited: not to have a watch of any kind exposes the traveller to more certain indignities than a scantily filled purse. The money may have been spent, but the absence of a watch can only be accounted for by a premeditated intention of not being robbed of it, which the '*ladron*' considers as an unjustifiable attempt to defraud him of his right. It must be said, to the credit of the Spanish brigands, especially those of the highest class, that they rarely ill-use women or children; nor do they commence firing or offering violence unless resisted. The next class of robbers—omitting some minor distinctions, such as the '*salteadores*,' or two or three persons who lie in ambuscade and jump out on the unprepared traveller—is the '*ratero*,' 'the rat.' He is held in contempt, but is not less dangerous. He is not brought regularly up to the profession and organized, but takes to it, *pro re natâ*, of a sudden commits his robbery, and returns to his pristine vocation. Very often, on the arrival of strangers, two or three of the ill-conditioned worst classes get up a robbery the next day for the special occasion, according to the proverb '*la ocasion hace al ladron*.' The '*raterillo*,' or small rat, is a skulking footpad, who seldom attacks any but single and unprotected passengers, who, if they get robbed, have no one to blame but themselves; for no man is justified in exposing Spaniards to the temptation of doing a little something in that line. The shepherd with his sheep, the ploughman at his plough, the vine-dresser amid his grapes—all have their gun, which, ostensibly for their individual protection, furnishes means of assault and battery against those who have no other defence but their legs and virtue.

"The regular first-class '*ladrones*' are generally armed with a blunderbuss, '*retajo*,' which hangs at their saddles, the high-peaked '*albarda*,' which is covered with a fleece, either white or blue, the '*zalea*.' Their dress is for the most part very rich and in the highest style of '*aficion*,' 'the fancy;' they are the envy and models of the lower classes of Andaluçians, being arrayed after the fashion of the smuggler, '*contrabandista*,' or the bull-fighter, '*torero*,' or in a word, the '*majo*,' or dandy, who, being peculiar to the south of Spain, will be more properly described in Andaluçia, which is the home and head-

quarters of all those who aspire to the elegant accomplishments and professions to which we have just alluded.

"Since these evils have so long been notorious, it is natural that means of prevention should likewise exist. If the state of things were so bad as exaggerated report would infer, it would be impossible that any travelling or traffic could be managed in the Peninsula. The mails and diligences, as we have said, are protected by Government, and are very seldom attacked; those who travel by other methods, and have proper recommendations, will seldom fail in being provided by the captain-generals, or the military commander in smaller districts, the '*commandante las armas*,' with a sufficient escort. A regular body of men was organized for that purpose all over Spain; and were called '*Miquelites*,' from, it is said, one Miquel de Prata, an armed satellite of the famous or infamous Cæsar Borgia. In Catalonia they are called '*Mozos de la Escuadra*;' they are the modern '*Hermidadad*,' the brotherhood which formed the old Spanish rural armed police. They serve on foot, like a sort of dismounted gendarmerie, and are under the orders of the military powers. They are composed of picked and most active young men; they are dressed in a sort of half uniform and half *majo* costume. Their gaiters are black instead of yellow, and their jackets of blue trimmed with red. They are well armed with a short gun and the '*canama*,' or belt round the belly, in which the cartouches are placed, a much more convenient contrivance than our cartouche-box; they have a sword, a cord for securing prisoners, and a single pistol, which is stuck in their sashes, at their backs. This corps is on a perfect par with the robbers, from whom some of them are chosen; indeed, the common condition of the '*indulto*,' or pardon to robbers, is to enlist, and extirpate their former associates,—set a thief to catch a thief; both the honest and renegade *Miquelites* hunt '*la mala gente*,' as gamekeepers do poachers. The robbers fear and respect them: an escort of ten or twelve *Miquelites* may brave any number of banditti, who never or rarely attack where resistance is to be anticipated. The *Miquelites* are commanded by a corporal of their own, and in travelling through suspected spots show singular skill in taking every precaution, in throwing out skirmishers in front and at the sides. They cover in their progress a large space of ground, taking care never to keep above two together, nor more distant from each other than gunshot; rules which all travellers will do well to remember, and to enforce on all occasions of suspicion. The rare instances in which Englishmen, especially officers of the garrison of Gibraltar, have been robbed, have arisen from a neglect of this precaution; when the whole party ride together they may be all caught at once, as in a trap. It may be remarked that Spanish robbers are very shy in attacking armed English travellers, and particularly if they appear on their guard. The robbers dislike fighting. They hate danger, from knowing what it is; they have no chivalrous courage, or abstract notions of fair play, any more than a Turk or a tiger, who are too uncivilized to throw away a chance: accordingly, the Spanish robbers seldom attack where they anticipate resistance,

which they all feel they will assuredly meet from Englishmen. They have also a peculiar dislike to English guns and gunpowder, which, in fact, both as arms and ammunition, are infinitely superior to the ruder Spanish weapons. Though three or four Englishmen have nothing to fear, yet where there are ladies it is always far better to be provided with an escort of *Miquelites*. These men have a keen and accurate eye, and are always on the look-out for prints of horses and other signs, which, escaping the notice of superficial observers, indicate to their practised observations the presence of danger. The *Miquelites* are indefatigable, keeping up with a carriage day and night, braving heat and cold, hunger and thirst. As they are maintained at the expense of the Government, they are not, strictly speaking, entitled to any remuneration from those travellers whom they are directed to escort; it is, however, usual to give to each man a couple of *pesetas* a-day, and a dollar to their leader. The trifling addition of a few cigars, a 'bota' or two of wine, some rice and dried cod-fish, 'bacalao,' for their evening meal, is well bestowed; exercise sharpens their appetites; and they are always proud to drink to their master's health, and are none the worse for his food."—Pp. 39, 40, 41.

After some sound advice to travellers to take with them what is essential, to trust as little as possible to supplies by the way, and to leave all over-daintiness at home, Mr. Ford returns to the subject of protection against robbers in the following terms:—

"Those, whether natives or foreigners, who cannot obtain or afford the expense of an escort to themselves, avail themselves of the opportunity of joining company with some party who are enabled to do so. It is wonderful how soon the fact of an escort being granted is known, and how the number of travellers increases who are anxious to take advantage of the convoy. As all go armed, the united allied forces become more formidable as the number increases, and the danger becomes less. If no one happens to be travelling with an escort, then travellers wait for the passage of troops, for the Government's sending money, tobacco, or anything else which requires protection. If none of these opportunities offer, all who are about to travel join company. This habit of forming caravans is very oriental, and has become quite national in Spain. It is almost impossible to travel alone; others will join; weaker and smaller parties will unite with all stronger and larger companies whom they meet, going the same road, whether the latter like it or not."—Pp. 42, 43.

It seems proper to add the remark of Mr. Ford, that

"Everybody in Spain travels armed to the teeth, and arrayed in a sort of costume for the road; and as all are cloaked and muffled up alike, a peculiar bandit-look is common to most persons one meets outside of a town."

And he suggests the consideration, that all this tends to produce an exaggerated impression on the minds of strangers respecting the actual numbers of *boná fide* highwaymen.

Such are the views stated by a writer of ample experience, and of very friendly dispositions to the people of Spain. They are offered by way of advice to travellers, and, we doubt not, contain important practical advice to them. But, so far from having diminished the pre-existing impression in this country respecting the robber-system in Spain, as Mr. Ford intended, we are mistaken if they will not greatly strengthen it. It would be difficult to find, within the same compass, a more striking portraiture of the social disorganization of a civilized country. The mail or diligence "protected by the Government," and "very seldom attacked;" the escorts of Miquelites, recruited in part from reclaimed robbers, which are officially furnished to other travellers, who have proper recommendations; the alacrity of all travellers, on hearing of an escort, to seek it out and join it, and failing this, the formation of a caravan, where every traveller is armed to the teeth;—all indicate a degree of insecurity, and a feebleness in the protective power of the law, which savour more of the progress of a caravan in the desert, than a journey through a kingdom which was formerly in advance of either France or Britain in civilization. Truly they call to mind the saying, that, in many respects, Africa has its beginning at the Pyrenees.

The Beggar-system in Spain is another unfortunate and prominent feature in its social condition. It would appear that the members of this profession, in their mutual intercourse, punctiliously observe the ceremony of addressing each other in terms which, in this country, would be thought the most impertinent satire.

"Here every beggar addresses a brother mendicant as *Señor*, *Don*, and *Caballero*, as a lord and knight."—P. 720, note.

"They are now an increased and increasing nuisance. The mendicant plague rivals the mosquitos; they smell the blood of an Englishman: they swarm on every side; they interrupt privacy, worry the artist and antiquarian, disfigure the palace, disenchant the Alhambra, and dispel the dignity of the house of God, which they convert into a lazaret-house and den of mendacity and mendicity. They are more numerous than even in the Roman, Neapolitan, and Sicilian States. They form the train of superstition and misgovernment which defile the most beautiful, and impoverish the richest portions of the earth.

"The Spanish beggars are dead to all shame; indeed, as Homer says, that feeling is of no use in their profession. They wear away the portals of the churches; they sit before the Beautiful gate, the old and established resort of cynics and mendicants, (Juv. iii. 296). There they cluster, like barnacles, unchanged since the days of Martial, (iv. 53), with their wallet, staff, dog, filthy tatters and hair, and barking importunity."—P. 171.

Unhappily it stands recorded, that in the troublous changes of Spain, so many of those who once knew better days, have been reduced to poverty, that "even canons and dignitaries," in ab-

solute distress, have "solicited charity from the passing Englishman." And Borrow states, in his melancholy account of the decay of the great naval arsenal of Ferrol, that

"Half the inhabitants beg their bread; and amongst these, it is said, are not unfrequently found retired naval officers, many of them maimed or otherwise wounded, who are left to pine in indigence: their pensions, or salaries, having been allowed to run three or four years in arrear, owing to the exigencies of the times. A crowd of importunate beggars followed me to the *posada*, and even attempted to penetrate to the apartment to which I was conducted. 'Who are you?' said I to a woman who flung herself at my feet, and who bore in her countenance evident marks of former gentility. 'A widow, sir,' she replied, in very good French; 'a widow of a brave officer, once admiral of this port.'—(*Borrow's Bible in Spain*, cap. 31.)

Painful as is this state of matters, it must not be regarded as occurring now for the first time in Spain, where innovations of any kind are so rare. The Spanish soldiery, towards the close of the seventeenth century, were so ill clothed and ill paid, that they both robbed and begged, to help out their pay. And a French traveller (Labat) saw even some of the inferior officers asking alms on the streets of Cadiz and in the garrison towns of Flanders:—

"Mais on doit dire," he adds, "*à leur louange*, qu'il n'y a rien de bas dans leur manière de demander: ils conservent toute leur gravité, et leur fierté; et semblent plutôt vous faire plaisir en recevant votre aumône, que vous en avoir obligation."

The Spanish beggar is said to be devoid of all shame. It is therefore a little puzzling to explain how his importunities should be at once put down, as Mr. Ford states they invariably are, by the simple specific of using the form of words quoted below, which would appear to derive their efficacy from the formality and ceremony in which they are couched, and which, by raising the beggar to a level (so to say) with his repulser, appear to be felt by him as checkmate. As to the efficacy of the specific, Borrow has borne testimony; and Washington Irving, in one of his tales of the Alhambra implies the same thing. He makes his old Spanish beggar there relate that, after receiving from several individuals a repulse, given in the terms about to be quoted, he at length laid himself down to starve, and call upon the Virgin; but addressed no second petition for alms to any one of his fellow-mortals.

"In Spain, the specific which operates like brimstone, the plea to which there is no demurrer, is this—and let the traveller character the form on the tablet of his memory—*Perdone V^{ma} por Dios Hermano!* My brother, let your worship excuse me, for God's sake!

The beggar bows—he knows that all further application is useless; the effect is certain if the words be quietly and gravely pronounced.”—P. 173.

In addition to the Robber-system and the Beggar-system, there is a third extensive organization, which, as drawn by Mr. Ford, unhappily forms a companion portrait to both of these,—we mean the Smuggler-system in Spain.

The extent to which the wretched fiscal regulations of Spain breed daring smugglers, and render them popular with all classes, affords striking evidence of the evils which blind and ignorant rulers may inflict on a country. The suicidal avarice of the Spanish Exchequer is a fruitful source of demoralization to the people, and weakness to the Government; and, indeed, it seems to be well ascertained that the swarms of *contrabandistas* require nothing but opportunity to be converted into bands of robbers. They abound in many of the provinces.

“The Ronda smugglers (in Andalucía) are some of the finest and most picturesque of their numerous tribe in Spain; their illegal pursuit is, in fact, the only real, active, and well organized system of the Peninsula. Mr. Macgregor, in his commercial report on Spain, (London, 1838), calculates that 300,000 persons are directly and indirectly interested in this vocation. Everybody smuggles more or less.”

This system

“is the curse of Spain and Spaniards; it fosters a body of reckless, active, armed men, who know the country well, and are ready for any outbreak.”

And, to crown all, the officers of the Spanish preventive service are so ill paid, that they eke out a livelihood by conniving with the smuggler. “An empty sack cannot stand upright,” says the pithy Spanish proverb. In Catalonia, “every body smuggles, especially the custom-house officers, commissioners, and preventive guards,” (p. 463.) It is in fine keeping with the character of these gentry, that, “while they facilitate smuggling on a large scale, by acting as confederates with the *contrabandistas*, who bribe them, they worry the honest traveller;” and, in short, says Mr. Ford,

“A Spanish *aduanero* (custom-house officer,) may be defined to be a gentleman who pretends to examine baggage, in order to obtain money without the disgrace of begging, or the danger of robbing.”—P. 205.

Turning now to a different aspect of the social state of the country, it will be found that the information supplied by Mr. Ford respecting the medicine and surgery of Spain, is not a little illustrative of Spanish characteristics. It appears that the hospitals are neglected; the faculty, even at Madrid, “are at least a century behind

the practitioners of England;" and they retain the oriental aversion to resort to the practice of dissection, in pursuing their anatomical studies. What species of operator he must be, who confines himself to the use of plates and models, until the moment when he is called in to treat a living subject, it may be left to his unhappy patients to say. But with all this there is a great outward show of colleges, professors, lectures, and diplomas. And the medical men, with that inordinate self-esteem, which unfortunately is one of the most Spanish of all the *Cosas de España*, "hold themselves to be the first physicians and surgeons on earth, and best qualified to wield the shears of the *Parca*." Were any well meaning, but simple friend, even to hint a doubt on this subject, he forthwith "would be set down as malevolent, envious, and an ass, for they think their ignorance the perfection of human skill." In one short sentence Mr. Ford has condensed the defective character of the medical faculty, when he says "their notions and practice are *classical, oriental, and antiquated*, and their acquaintance with modern works, inventions, and operations, very limited."—P. 174.

Considering the important influence which the medical profession exercises on society, we must still make room for the following extracts. They throw equal light on both doctor and patient:—

"Most Spaniards who can afford it, have their family doctor, or *Medico de Cabecera*, and their Confessor. This pair take care of the bodies and souls of the whole house, bring them gossip, share their *puchero*, purse, and tobacco. They rule the husband through the women and the nursery; nor do they allow their exclusive privileges to be infringed on. Etiquette is the life of a Spaniard, and often his death. Every one knows that Philip III. was killed, rather than violate a form. He was seated too near the fire, and, although burning, of course as king of Spain the impropriety of moving himself never entered his head; and when he requested one of his attendants to do so, none, in the absence of the proper officer whose duty it was to superintend the royal chair, ventured to take that improper liberty. In case of sudden emergencies among her Catholic Majesty's subjects, unless the family doctor be present, any other one, even if called in, generally declines acting until the regular Esculapius arrives. An English medical friend of ours saved a Spaniard's life by chancing to arrive when the patient, in an apoplectic fit, was foaming at the mouth and wrestling with death; all this time a strange doctor was sitting quietly in the next room smoking his cigar at the *brasero* with the women of the family. Our friend instantly took 30 ounces from the sufferer's arm, not one of the Spanish party even moving from their seats,—*hunc sic servavit Apollo!*

"The Spanish medical men pull together—a rare exception in Spain—and play into each other's hands. The family doctor, whenever ap-

pearances will in anywise justify him, becomes alarmed, and requires a consultation, a *Junta*. What any Spanish *Junta* is, need not be explained; and these are like the rest, they either do nothing, or what they do do, is done badly. At these meetings from three to seven *Medicos de apelacion*, consulting physicians, attend, or more, according to the patient's purse; each goes to the sick man, feels his pulse, asks him some questions, and then retires to the next room to consult, generally allowing the invalid the benefit of hearing what passes. The *Protomedico*, or senior, takes the chair; and while all are lighting their cigars, the family doctor opens the case, by stating the birth, parentage, and history of the patient, his constitution, the complaint, and the medicines hitherto prescribed. The senior next rises, and gives his opinion, often speaking for half an hour; the others follow in their rotation, and then the *Protomedico*, like a judge, sums up, going over each opinion with comments: the usual termination is either to confirm the previous treatment, or order some insignificant *tisana*: the only certain thing is to appoint another consultation for the next day, for which the fees are heavy, each taking from three to five dollars. The consultation often lasts many hours, and is a chronic complaint. It occurred to our same medical friend to accidentally call on a person who had an inflammation in the cornea of the eye: on questioning he found that many consultations had been previously held, at which no determination was come to until at the last, when sea-bathing was prescribed, with a course of asses' milk and Chiclana snake-broth. Our heretical friend, who lacked the true *Fe*, just touched the diseased part with caustic. When this application was reported at the next *Junta*, the *Medicos* all crossed themselves with horror and amazement, which was increased when the patient recovered in a week."—Pp. 175, 176.

It should perhaps be noticed in passing that there are two versions of the death of Philip III., and that "all the Spanish historians are indignant at the anecdote (above quoted,) which they treat as a contemptible French invention."*

We shall conclude our extracts with the account which our author gives of the hotels and inns of Spain. It serves to illustrate the actual condition of the country, and will not a little surprise those whose observation has been limited only to the comfortable hotels of Britain. Mr. Ford remarks, that—

"As the higher orders in Spain seldom travel, and never for pleasure; and as the other classes are poor, inured to roughing it, and easily contented, there has been no demand for those comfortable hotels which we have taught the continent."

Accordingly, the inns of Spain have been "divided by wags," into three great classes—"the bad, the worse, and the worst."

Passing by the few *fondas*, or hotels, which exist only in the

* DUNLOP'S *Mem. of Spain*, i. 4.

largest towns and seaports, a description of the *Posada*, "the genuine Spanish inn," will be found not a little curious. Such also is the account of the *Venta* which appears to be a *posada* of a lower sort, and takes the superlative rank in the above classification,—

"The *posada*, as a public inn, is, strictly speaking, bound only to furnish lodging, salt, and the means of cooking whatever the traveller brings with him, or purchases in the village."

Mr. Ford here judiciously advises an English traveller, arriving at a *posada*, to expect little, and thus he will escape disappointment; to feel no surprise, except on "those rare occasions when he finds anything actually ready at a *venta*;" and, on the whole, to compare the *venta* rather with the *khans* of the east, than with the inns of civilized Europe.

In the *ventas*, it is a redeeming feature, however, that

"the accommodation for the *beast* is excellent: cool, roomy stables, ample mangers, a never-failing supply of fodder and water, all ready—every comfort and luxury which the animal is capable of enjoying is on the spot; as regards *man*, all is the reverse—he must forage abroad for anything he may want. Only a small part of the barn is allotted him; and then he is lodged among the beasts below, or among the trusses and sacks of their food in the lofts above. He finds, in spite of this, that if he asks the owner what he has got, he will be told that there is *every thing*—*hay de todo*; which too often means, in reality, every thing *that he has brought with him himself*; which, as regards anything at all out of the way, is the safest and usual plan. The *ventero* seldom has anything himself; every thing wanted is to be procured out of doors, in small shops, and frequently not at all."

These shops, by the way, were often little monopolies of the adjoining lord of the soil.

The *ventas* have sometimes an imposing exterior,

"while all within is dark, dirty, and dilapidated. The ground floor is a sort of common room for men and beasts. The portion appropriated to the stables is often arched over, and very imperfectly lighted, to keep it cool, so that even by day the eye has some difficulty at first in making out the details. The ranges of mangers are fixed round the walls, and the harness of the different animals suspended on the pillars which support the arches. A wide door, always open to the road, leads into this great stable, or common hall; a small space in the interior is always left unencumbered, into which the traveller enters on foot or on horseback. No one greets him; no obsequious landlord, bustling waiter, or simpering chambermaid takes any notice of his arrival. He proceeds, unaided, to unload or unsaddle his beast; and having taken him to a manger, applies to the *ventero* for the '*pienso*,' fodder for his beasts; '*ganado*,' that is '*paja y cebada*,' straw and barley. This is the ancient oriental forage,—'Barley also and

straw for the horses,' (1 Kings, iv., 28.) Very little hay is used in Spain, except in the north-western provinces and in some of the valleys."—P. 25.

After taking care of his beast,

"the traveller thinks of himself. One, and the greater side of the building, is destined to the cattle—the other to their masters. Immediately opposite the public entrance is the staircase, which leads to the upper part of the building, which is dedicated to the lodgment of fodder, fowls, fleas, and the better class of travellers."—P. 26.

It is another proof of the stationary condition of Spanish habits, to find that a lively French writer, Madame d'Aulnoy, describing the *venta* of the 17th century, sketches an outline so similar to that of Mr. Ford, and states that "they are all alike."

"When you come into one of them, wearied and tired—roasted by the heat of the sun, or frozen by the snows—you see neither pot on the fire, nor plates washed. You enter into the stable, and from thence to your chamber. The staircase by which you go up is very strait, and rather resembles a steep ladder; you are then shewn an apartment, hung with little scurvy pictures of saints; the beds are without curtains. They have only one cup in the house; and if the mule-drivers get first hold of it, which commonly happens, you must stay patiently till they have done with it, or drink out of an earthen pitcher. Though you arrive at midnight, you must send to the butcher's, the market, the tavern, the baker's—in fine, to all parts of the town—to gather wherewith to make a sorry meal. They put what you would have roasted, on tiles; and when it is well grilled on one side, they turn the other. When it is flesh, they fasten it to a string, and so let it hang on the fire, and turn it with their hands; so that the smoke makes it so black, it is disgusting to look on."*

Apparently there is now one small exception from the general rule of sending abroad for every thing:—

"The live stock—hens and chickens, '*gallinas y pollos*'—run about the whole ground-floor, picking up anything, and ready to be picked up themselves and dressed. All the operations of cookery and eating—of killing, sousing in boiling water, plucking, et cetera—all preparatory, as well as final, go on in this open kitchen."—P. 28.

In the *ventas*,

"chairs are a luxury. The lower classes sit, as in the East, on low stools, and fall to in a most oriental manner, with a frequent ignorance of forks. They substitute a short wooden or horn spoon, or 'dip' their bread into the dish, or fish up morsels with their long pointed knives. They eat copiously, but with gravity; with appetite, but no greediness. No nation, as a mass, is better bred or mannered than the lower classes of Spaniards."—P. 29.

* DUNLAP'S MEM. II., 400.

With respect to the moderation of the Spanish appetite, it may not be amiss to quote the remark of Lithgow, in his travels (p. 356), who takes a distinction. "The Spaniard," says he, "is of a spare diet and temperate, if at his own cost he spend; but if given gratis, he hath the longest tusks that ever played at table."

We shall not enter on the far-renowned roguery of the Spanish *venteros*, displayed in such tricks as palming stewed cat for stewed hare on their guests, or watering their wine. Nor can we dwell on the respectable list of eatables, "forming the foundation of the national cuisine," such as the stew of hare or partridges—dry salted cod-fish—"delicious hams," whose predecessors delighted the Romans—dry and highly spiced sausages—fresh black puddings—the *gazpacho*, a cooling acetous preparation of vegetables, indispensable to labourers in sultry days—or eggs, *garbanzos*, (chick-peas,) &c., the *olla* (formerly termed *olla podrida*, or *pot pourri*) a savoury stew in Andalucía, of which the *puchero* is an insipid imitation in Castile. Even the oil and the garlic, though so copiously used, we shall scarcely touch on; and still less, if possible, on the Valencian butter, which is an article

"composed (for the cow has nothing to do with it) of equal portions of garlic and hog's lard, pounded together in a mortar, and then spread on bread, just as we do arsenic to destroy vermin. The Catalonians have a national soup, which is made of bread and garlic, equal portions, fried in oil, and then diluted in hot water. This mess is called *sopa de gato*, probably from making cats sick."—P. 28.

On the whole, the qualified remark seems to be too well-founded which Mr. Ford makes on the Asturians, that

"they are among the best cooks in Spain, or rather the least bad in this land of gastronomic Erebus, where people only eat to live, like the beasts that perish."—P. 695.

We must now, however, bring our notice of the Spanish Hand-Book to a close. In doing so, it affords some consolation, while reflecting on the great moral and social evils which afflict Spain, to perceive that so many of them are susceptible of a remedy, which ought not to be beyond ordinary reach. To clear the highways of robbers, and to open up good communications through the kingdom, seem to be achievements, the accomplishment of which may reasonably be expected at no distant time.

The removal of another fruitful source of loss and demoralization to the country—the smuggling system—would be at once accomplished, if the true mutual interests of nations were better understood, and the principles of free trade applied to international commerce. It may seem almost Utopian to anticipate such a state of things in Spain; but we are sanguine as to the influence

which will ere long be exerted upon other nations by the example of Britain, as soon as she sets herself in good earnest, and on broad principles, in the right path, by repealing her corn-laws, and abolishing her differential duties.

But the first essential element, in the social and political amelioration of Spain, will be the restoration of order and tranquillity, on such a basis as shall give a solid assurance of their permanent continuance. It is long, indeed, since a well-founded hope on this subject could be justly entertained in Spain. No ground was laid for it by the return of Ferdinand VII. at the close of the Peninsular war, to become the tool of a perfidious and sanguinary *camarilla*, and to re-establish civil and religious despotism, even at the cost of reviving the baleful Inquisition. Six years of trouble and misgovernment, involving above twenty changes of administration, and various conspiracies, at length resulted in the Revolution of 1820. But this new state of affairs, as it went the whole length of re-adopting the constitution of 1812, was highly unsatisfactory to a large portion of the Spanish nation. Intestine discord and conflict followed, in which powerful opposing interests were so much balanced, that, not improbably, if left to themselves, mutual concessions might have been found indispensable on either side, and thus a compromise might have been produced, to the great common benefit of all. But, unhappily, the independence of the kingdom was not respected, and, in an evil hour, France threw her sword into the scale. In 1823, all Spaniards who were opposed to absolute despotism, were put down by the French invading armies, under the leadership of that same Duc d'Angoulême, who was destined, so soon after, to expiate, by a life of exile, a similar assault on the liberties of his native country.

The civil wars and commotions, consequent on the death of Ferdinand and a disputed succession, have hitherto exhibited little else than a chronic state of insecurity and revolution, in which each successive triumph has contained within it the seeds of a speedy reverse. Once, indeed, there was a promise of better things for Spain, and, consequently, for Europe; a promise which was disappointed apparently, in a great degree, through the influence of foreign intervention, from the same quarter, and for the same object, as before. We allude to the regency of Espartero, who, by the confession of both friends and foes, would probably not have been overthrown either by native or foreign hostility, had he only exerted the powers at his disposal with the unscrupulous energy of a tyrant, and shown less reverence for the law and the constitution. For the wrong done to Espartero, his country is now paying the penalty, in being exposed to the unprincipled and ruthless sway of the dictator, Narvaez. But

the permanence of the dominion of Narvaez is surely as improbable as it is undesirable. Originating in crime, oppressed with financial difficulty, and supported by the power of the sword, it would require stronger aid than can be borrowed from the now emasculated Cortes, or even from a crafty but short-sighted priesthood, to assure the duration of that dominion. The friendship of the priesthood, whose demands it will be found alike impossible to satisfy or to refuse, is indeed one of the most fatal symptoms of the present order of things. And although all conspiracies, whether fomented by the Government or not, have hitherto been quenched in blood, this will not lend genuine vigour or vitality to an Administration, which nothing but its terrors can save from being as contemptible as it is hateful.

It would be somewhat bold to venture on any confident prediction as to the next phasis which will be exhibited in the political progress of Spain, considering the variety of conditions through which she has passed in modern times, and the deplorable result of each and all. But this much may be said, without the imputation of rashness; that it is difficult to see how a permanent foundation for peace and order can now be laid in Spain, until the power of the monarch be established, only co-ordinately with the liberty of the people, or at least be based on some system containing within it the germ of constitutional freedom. It may be, that the Spanish nation is not now fitted for the full enjoyment of political freedom, in the British acceptation of that term. But at all events, it appears to be, in various quarters, sufficiently leavened with a knowledge of the rights which are inherent in the people, under every form of just government, to prevent the establishment of permanent tranquillity under any political system which does not recognize the existence of these rights, and provide for the fuller development of the popular element in the legislature, in proportion as the wealth and intelligence of the people increase.

Even if Spain were suffered to become an apanage in the family of Louis-Philippe, it seems very doubtful if France could more effectually put down all liberalism there than Austria now does in Italy. And in any other contingency, there is little other prospect for Spain, so long as the very germ of constitutional freedom is denied to her, except a political condition analogous to that of Italy, in which conspiracy will succeed conspiracy, without more rest or tranquillity in the intervals between than may belong to a smouldering volcano. The price, meanwhile, which must be paid for this misgovernment whilst it endures will be wretchedness to the people within its sphere, and peril and injury to the European commonwealth without.

But so soon as order and tranquillity shall be established on a

basis, which, instead of placing king and people in a state of antagonism, as under the political relations of a despotism, shall combine them in one common interest, as under the relations of a constitutional monarchy, the gain to Spain and Europe will be not less than the removal of the existing paralysis which disables one of the most important members of the family of civilized nations. Such a return to vital prosperity seems but merited by a people who displayed the high qualities for which Spaniards were distinguished before they were subdued and destroyed by evil institutions. That heroic race, which, in former time, so nobly rolled back the tide of Saracenic victory from the Pyrenees, and, ever in the van of Christendom, bled freely to redeem their country from a foreign yoke, is worthy of a destiny far different from that to which she has now so long been doomed. Were good government once established in Spain upon a firm basis, the kingdom would be, as it were, created anew. The wounds inflicted by a long course of misgovernment would at last disappear. The national injuries resulting from the cruel expulsion of the whole people of the Jews, and from the ruthless deportation of the entire Morescoe nation—injuries which have left behind them deep traces, still visible after the lapse of centuries—would soon be obliterated and defaced, along with more modern marks of infirmity and decay, before the reviving energies of the people, eagerly aided as they would be, to develop their boundless agricultural and mineral resources, by the enterprize and activity, the machinery and capital, which would flow in from other nations, and most of all from Britain. There is, moreover, another gain which would then be realized, and which Spanish history proves to be of no mean importance. The government of the kingdom, being no longer independent of constitutional control from the people, would be obliged primarily to consult Spanish interests; and would, therefore, be restrained from lavishing the blood and treasure of Spain on foreign projects and quarrels, as has too often happened heretofore, both under the Austrian and the Bourbon dynasties, the latter of which has frequently rendered Spain a mere convenient tool to subserve for the time, the anti-British purposes of France.

These are fair anticipations to indulge, and yet their realization might be expected with confidence, were the germ of constitutional freedom to take secure root in Spain. We are unwilling to believe either in the impossibility or even the improbability of this. Again and again such a consummation has seemed on the eve of being accomplished, when the fairest hopes were crushed by the baleful intervention of foreign steel and foreign gold. But it will not always be so. Spain is destined, we trust, ere long, to resume its high place among the nations. In the mean-

time, when taking leave of the subject, we cannot but remember that a peculiar interest, in connexion with the Peninsula, must ever be cherished in Britain. The sea around her rocky coast, from age to age, from the times of Drake to those of Collingwood and Nelson, has been the field of naval victory, and a home of glory to "the flag that braved a thousand years the battle and the breeze." And in high rivalry, the land, along its plains, and streams, and mountain-passes, has been witness to British triumph, from the era of the heroic Edward the Black Prince, to that of the mournful honours of Coruña, hallowed by the ashes of Moore—and of the dazzling career of Wellington, advancing from conquest to conquest, by Talavera, and Salamanca, and Vitoria, till at length the heights of the franchised Pyrenees were crested with the victorious banners of Britain.

While recalling the modern exploits of Britain, and the scenes where so many of her heroes sleep—and while musing on those earlier days of Spain when her true sons fought and fell in many a bloody field, bravely pursuing that chivalrous career of war and victory which at length redeemed her from the Moor—might not both Spaniard and Briton now join in applying to Spain those beautiful lines in which Byron poured out his spirit over the fallen warriors of Greece?

"The waters murmur'd of their name;
The woods were peopled with their fame;
The silent pillar, lone and gray,
Claim'd kindred with their sacred clay;
Their spirits wrapp'd the dusky mountain;
Their memory sparkled o'er the fountain;
The meanest rill, the mightiest river,
Roll'd mingling with their fame for ever.
Despite of every yoke she bears,
That land is glory's still and theirs!"

Alas! that more cannot yet be added respecting the freedom of Spain, than these words from the same poet,

"Oh! still her step at moments falters,
O'er wither'd fields and ruin'd altars,
And fain would wake, in souls too broken,
By pointing to each glorious token."

But we trust that better days for Spain are drawing nigh. She was sunk in a state of apathy and stagnation, from which no ordinary events were fitted speedily to awake her. Even the frightful violence of which she has lately been the degraded witness, will prove to be fraught with ultimate good, if it arouse her thoroughly to the task and the duty of regeneration. The darkness at present surrounding her, though it seem that of midnight, may be but the herald of approaching dawn.

ART. VII.—*Researches into the Physical History of Mankind.*

By J. C. PRICHARD, M.D. London, 1844.

Crania Americana, or History of the American Races. By

SAMUEL G. MORTON, M.D. Philadelphia, 1839.

Proceedings of the Ethnographic Society, London. Athenæum, 1844-5.

THE physical history of the various races of mankind has of late begun to excite considerable attention. Indeed, the science may be said to be almost entirely of modern origin. We hear little of the subject among the ancients, for the Greeks and Romans were too apt to look upon all other nations as barbarians—they disdained to make their languages a study, and cared not to trace the origins and connexions of the tribes with whom war or commerce brought them into casual intercourse. The limited knowledge which the civilized nations of antiquity possessed of the earth's surface, and their comparatively imperfect means of extensive and rapid locomotion, were also unfavourable to speculations of this nature; the shores of the Mediterranean almost bounded their naval excursions; a march into India was an exploit not to be repeated in many centuries; and the discovery of Britain, "*toto orbe divisa*," was reckoned the utmost point of maritime exploration.

But when the skill and daring of modern navigators enabled them to circumnavigate the globe, they came upon races of men who had been so long and so completely isolated from the original stock, that the poor savages looked upon their visitors as superior beings—as divinities from another world; while these again beheld, with equal astonishment, forms and features so strange, and modes of life so singular and debasing, as to lead them to doubt, not without some show of reason, whether those beings, with so much of the human form, and yet with so much of the habits of the brute, could in reality belong to the same species as themselves.

The physical history of man, unlike that of the lower animals, assumes two distinct phases as we view him in two distinct states—as a savage, and a civilized being. In the one state, he exists in a condition nearly allied to the brutes,—is in fact an animal furnished with certain instincts and impulses by which he is guided, while reason is all but obscured; in the other, he is actuated by a reflecting mind, illuminated by a superior intelligence, and enriched by traditional knowledge and

experience. In the savage state, he roams about almost naked and houseless, and unprovided with any of the resources of art; his chief energies are bent upon the means of procuring food—and for this purpose he exercises all the habits of a carnivorous animal, joining the swiftness and perseverance of the dog and wolf to the cunning and ferocity of the lion and tiger. He is gregarious chiefly for the sake of more easily hunting down his prey; and when one tribe, so associated, encroaches the least upon the hunting-grounds of the other, fierce combats and unrelenting massacres are the consequence. He is ever on the defensive, and war against every living thing occupies his whole thoughts. In this, his most degraded state, all the worst passions are called into action, as cruelty, revenge, pride, combativeness; and these are but faintly mitigated by a few of the virtues, if we may not rather call them the instinctive impulses, of his nature. He has the common animal care of his offspring, but the fact of many savages destroying their female and deformed children, places them, we are afraid, even below the brutes in the exercise of this instinct, as the deliberate act of cannibalism sinks them to a degradation even still lower. Nor are the indications of the reasoning faculty in a great degree raised above the manifestations of animals. We speak of the lowest condition of savage life—for of it there are many grades—such as was seen among the aborigines of New Holland, who, when first discovered, had no arms but clubs of wood, no clothing whatever, lived in holes in the earth or caves of the rocks, and were destitute of even the rudest implements for catching fish or snaring their prey—whose minds were dark and gloomy, and influenced by the fear of evil agencies alone.

But when we turn to man in a civilized state, he assumes a very different aspect. His purely selfish and isolated character is laid aside, and he joins his fellowmen to form a society regulated and controlled by laws conducive to the public good. His gross animal propensities and debasing passions are moderated and subdued under the mastery of reason and the moral sense—and instead of being the slave of the elements around him, he now appears as exercising a sway and command over matter, and wielding it to his own purposes. His reasoning powers expand into full activity—his mind dwells on the experience of the past, or extends into the future, while a communicating ray of light, dim and unobtrusive, yet efficacious and highly influential, is opened up between it and the world of spirits. Thus with his two natures, he becomes a being totally different from all other animals. Myriads of these appear on the earth in successive generations, but they leave no traces of their existence behind them—they accumulate nothing to forward the attain-

ments of their respective races, while man, even from the first, has stamped his existence in the records of time. We can trace him from his earliest progress, emanating from a single family—spreading over the surface of the globe—building cities—accumulating knowledge—extending science—cultivating the face of nature—and making the wild animals of the forest retire before him.

When, after a wide separation and the lapse of many ages, the extreme points of the human race again came into contact, it was not much to be wondered at that the civilized man looked upon the savage, changed and degraded, not only in his moral but his physical aspect, as a being of a species distinct from his own, or that his pride, or his science, hesitated to acknowledge him as his brother. Indeed, the identity of the human species has formed a subject of keen discussion ever since the attention of naturalists has been directed to the matter, and the elucidation of the point in dispute still continues to exercise the ingenuity of our ablest philosophers. The result of these learned discussions is, that much more definite rules have been laid down as to what constitutes a distinct species, so that throughout both the animal and vegetable kingdom, the idea of a species is now pretty well defined. Thus

“A race of animals or plants, marked by certain peculiarities of structure, which have always been constant and undeviating, constitutes a species; while two races are considered as specifically different, if they are distinguished from each other by some peculiarities which one cannot be supposed to have acquired, or the other to have lost, through any known operation of physical causes.” *

On applying this test to the different races of mankind, however varied their external features may be, there is nothing in their bodily structure or physiology which can lead us to suppose that they belong to more than one species. On the contrary, there is such a uniform resemblance of the skeleton, the same number and general shape of the bones, the same type and structure of every part of the body—the same kind of teeth—the same average duration of life—the same period of gestation, and a prolific offspring from all mixtures of races, instead of the hybrids resulting from a mixture of different species, together with all those circumstances which, in other animals, constitute an identity of species, as to leave no doubt, on physical proofs alone, irrespective of all other evidence, that mankind have sprung originally from a common source. We believe there are few

* PRICHARD'S *Researches*.

authorities of the present day who deny the identity of species, and none who have brought forward any valid objections against it.

It must be allowed, however, that there are many very marked and striking differences of feature, and even modifications of form among nations, as well as various tints of skin, which give rise to very obvious distinctions and divisions into races. These modifications are denominated varieties, and a great deal of light has been thrown upon this subject from analogous facts, drawn from the vegetable kingdom, and from various races of the inferior animals.

Thus it has been ascertained that many species of animals, as well as plants, have a tendency to diverge into varieties, and this is particularly the case with those plants and animals which embrace the greatest range of climate in their dispersion over the earth's surface. And this pliability of their constitutions would seem to be one of those provisions which nature employs to suit them to the various soils and climates over which they range. Striking varieties of colour and shape and size are thus frequently exhibited in hogs, sheep, horses, and dogs. In a few years, and within a few generations, from a single pair, such varieties of breeds will proceed, so differing from each other as might render it matter of doubt whether they were not entirely distinct species, were not the proofs to the contrary sufficiently evident. Now the same analogies have been applied to the human race. Man has evidently been destined to people the whole earth, and it has accordingly been supposed that, by some law of his nature, aided by the influence of external circumstances, he assumes certain peculiarities of form and colour, suited to the locality in which he may be placed ; or, according to another supposition, from the very earliest periods of population, certain leading varieties have spontaneously originated, and going forth into different regions of the earth, have found their appropriate climates, and have given rise to the various races which we still find distinctly marked by their original type.

It is certainly a remarkable circumstance, that at a very early period in the history of the human race, certain marked varieties of the species were in existence. We have a proof of this from a painting which was lately discovered in the ruins of Thebes, conjectured to be of the period of the eighteenth dynasty, and early in the times of the Egyptian Kings, perhaps much about the time when Abraham lived. We give the description of this curious picture in the words of Mr. Wilkinson :—

“ Number 35 is by far the most curious of all the tombs in Thebes, since it throws more light on the manners and customs of the Egyptians than any hitherto discovered. In the outer chamber, on the left hand (entering), is a grand procession of Ethiopian and Asiatic chiefs,

European, the same cellular tissue is filled with a whitish matter. In the intermediate coloured races, this fluid assumes various tints, and is, in fact, of the same nature as that which gives colour to the various shades of the hair and eyes.

If, then—from the general structure of the body, the various modifications of form in the skull, and even from the diversities of colour—there be no valid ground for establishing a specific difference between the various races of men, but, on the contrary, strong reasons for assuming the theory, that they all had a common origin—the only question for discussion is—Under what peculiar circumstances the existing varieties of mankind had their origin? This is an interesting, but it must be allowed, a very puzzling question. Two views of the subject present themselves:—Either that, at a very early period of society, certain varieties at once sprung up, and going forth over the surface of the earth, made choice of those regions best suited to their constitutions—in other words, that although several species of men were not directly created, yet, that certain varieties, destined to be permanent, sprung out of the parent stock, and have continued distinct till the present times; or, on the other hand, that man, like many of the inferior animals, was created with a constitution predisposed to pass into various modifications, according as he was subjected to the influence of external and adventitious causes—the chief modifying causes being climate, local situation, habits of life, and similar influences.

In support of the latter view, there are many facts which are generally adduced. Thus, the modifying effects of locality and climate are abundantly evident.

In speculating upon climate as the predisposing cause of the difference of colour, one most remarkable fact at once presents itself to our observation—that the tint of the skin varies according to the latitude or the distance from the equator where the influence of the sun is most powerful. Thus, with very few exceptions, which can be tolerably well accounted for, the nations with the darkest hue of skin inhabit the torrid zone. A lighter tawny shade is found prevailing in the hotter parts of the temperate regions; gradually the tint becomes less as we approach the frigid zones, till at last the ruddy fair countenance and light hair is found to prevail. Thus among the nations of Europe, who have undoubtedly had one common origin, we find this gradation of colour. In the south, in Spain and Portugal, the hair and skin are dark; in France and Germany, the hue becomes lighter; while in Denmark and Norway, light hair, blue eyes, and a fair complexion, universally prevail. The greater part of Africa is peopled by numerous tribes of the Negro race, whose habits, features, and general aspect, all bespeak them to be of

the same origin; yet we find various shades of colour. Thus, in the tropical parts of that continent, the skin is of a jet black; in the mountainous regions of the Atlas chain, where altitude of situation has a similar influence as difference of latitude, several tribes are of a lighter tint; and, in the southern parts of the same continent, where a temperate climate prevails, the colour of the Hottentots and Caffres is of a light reddish hue, and the general aspect not unlike that of the Chinese or American Indians.* We find the same on the American continent: the natives of California, within the tropics, are as black as the Negro, while the inhabitants of the colder regions to the south and north assume a much lighter hue.

Among the North American Indians, it is not unusual to meet with reddish hair and blue eyes, with skins but slightly tinged.† The effects of civilization are also remarkable as tending to moderate the influence of climate. It has been noticed that the Turkish and Asiatic ladies of rank, who are confined to the house, have much fairer skins than the men, who are daily exposed to the influence of the sun; and in many countries where a black population prevails, the common people are of a deeper hue than the higher ranks,—indeed, the more rude and savage the nation, the deeper generally is the tinge of the skin, and the more marked and characteristic are their features. It must be allowed, however, that some exceptions to these general facts are observable: in some tropical countries we find races less dark than those in higher latitudes, and some again, as the Esquimaux and Canadian Indians, who preserve their dark skins even within the arctic circles. These anomalies can only be accounted for by reflecting that savage tribes are continually changing their residences, making sudden and long migrations; and that, if the colour of the human skin can be changed and modified by climate, this can only be supposed to take place after the lapse of many ages of permanent residence in situations favourable to such changes. The same reply is applicable to the objections to the influence of climate, made by those who affirm that Europeans, who have long resided, or may have been born, in tropical countries, are in nowise changed in colour or features even in the lapse of several generations. In considering objections of this nature, it must be always borne in mind that many centuries would probably be necessary to impress any permanent alteration on the constitution; that this influence is most likely to take effect on savage man, who is exposed completely to its

* BARROW'S *Voyage to China*.

† LEWIS, and CLARKE, and JAMES'S *Travels in the Rocky Mountains*.

operations ; and that no proper or decisive illustration of the circumstance can be drawn from colonies of civilized men going forth to any region of the globe, protected as they are by all the accessories of art against the influence of the elements. Thus, the acclimation of man would appear to be a slow and gradual process ; and when, at last, distinctive varieties were produced, these continued to preserve a very permanent character. Peculiar varieties thus formed became suited also to particular climates. Thus, while the native of the north finds almost a certain grave in the torrid deserts of Africa, the Negro droops and languishes in a frigid clime.

Such are the views which are generally entertained by those who base their speculations on the analogies afforded by the example of the lower animals, and of the economy of vegetable productions, joined to the actual facts which the observation of the various races of men present to us ; and, on the whole, we think it cannot be denied that climate, and other external circumstances, exercise a modifying influence on all races of men, to a certain extent. But whether these influences are the sole cause of varieties, is a proposition not so easily determined. In favour of the first hypothesis which we have propounded—that certain leading varieties may have at once originated in the early periods of society, and gone forth the propagators of distinct races which still remain permanent—there are not wanting some striking facts, and not a few plausible conjectures. Thus, from the earliest periods of the history of man, we can trace certain distinct races who have subsequently extended over the earth and peopled its surface ; but they have done so without intermingling. Successive streams or waves of population, have flowed out, as it were, from central sources, but these currents have observed a distinct and unmingled tract. One great stream—the Caucasian race—proceeded from north-western Asia, peopling Greece, Italy, and the whole of Europe. Successive inroads of new swarms came one after the other ; but still it was the same people from the same stock, varying somewhat in their physical structure, impressed by the modifying influences of external circumstances, but still the same in mental and bodily energy, imbued with the same feelings, and using the same radical language. Another great wave of population flowed on over Eastern Asia—a peculiar people, strongly and permanently marked—branching out into great nations, and spreading far and wide, yet still retaining all those characteristics of mind and body which constitute the great Mongolian race of the human family. We need not particularize the Ethiopian branch—the woolly-haired Negro—so well marked and distinct as to physical character, and no less isolated by locality than by destiny, from the other races of man—

kind. How strange that all these races, with their wandering propensities, should never have amalgamated—that they should have frequently met, and, in many instances, even been neighbours for thousands of years, and yet never to any extent commingled! We have repeated instances in the records of history, of a horde or colony coming into the country of another, and there settling down and becoming as one nation; but these were instances of different portions of the same original race commingling together. We have no authentic account of Mongolians to any extent coalescing with Negroes, or either of these with the Caucasian family. The alleged exception of the Turks being a mixed breed between the Mongol and the Circassian and Georgian races, is by no means ascertained; nor have we yet any accurate facts regarding the so-called mixed races of Northern Africa. Neither in the whole Mongolian range of inhabited territory, which includes a considerable portion of the torrid zone, do we find any decided race with the Negro characteristics—though here, climate undoubtedly exercises a certain influence in imparting a deeper tinge in the skin, and other modifications on the well marked but still permanent Mongolian type. Nay, so far from permanently amalgamating, there is reason to infer that when a colony of one of these distinct and primary races invades the country of another race, the weaker party gradually becomes extinct under the superior influence of the other. An illustration of this nature is now in progress among the Indian tribes of North America; and in New Holland the extirpation of the aborigines is wellnigh consummated. These are a few of the facts and reasonings which have suggested themselves to our mind in the consideration of this subject. Without excluding altogether the modifying effects of climate and other external circumstances, but without going the length of assigning the whole effects to these circumstances, we think the facts just stated compel us to look for some other cause, not perhaps altogether independent of, but co-operating with, external influences. But to determine this question, we are not yet sufficiently acquainted with the laws which regulate even the analogous cases of varieties in the animal and vegetable kingdoms, still less with those which may influence the human economy; perhaps, too, the same general laws which apply to the rest of organic nature may be special or modified in the case of man, where not only his physical but his moral destiny is concerned. In the case of other organized beings, varieties are not indefinitely permanent, for their offspring have always a tendency to return again to their original type. Now the peculiarity of man is, that at an early period of the existence

of the post-diluvian population of the globe, a certain number of leading varieties appear to have sprung up and remained permanent, that is, the radical races suffer no material change, though sub-varieties are continually appearing among the individual races which have not the same permanency, but seem evidently influenced by external circumstances.

In the various races of men, the only part of the body which exhibits any marked diversity of form is the head, for the slight variety in the bones of the leg in the negro is of little importance, nor is the difference of stature or other incidental circumstances of any consequence. The form and size of the head, and the cast of the features, vary exceedingly, so that almost every tribe and nation have a peculiar physiognomy. Three permanent varieties, however, are very remarkable, and have been well characterized by Blumenbach,* under the denominations of the Caucasian or white race, the Mongolian or tawny, and the Ethiopian or black. As these varieties appear to have been of very early origin, and still continue permanent in large masses of the human family, they may not inaptly be styled primary. They are thus accurately characterized by Blumenbach:—

In the Caucasian variety, the head is almost round, and of the most symmetrical form, the cheek bones are rather narrow, without any undue projection, the jaws are well rounded, the front teeth of each being placed perpendicularly. The face is of an oval shape, straight, and the features moderately prominent, the forehead is arched, the nose narrow, slightly arched, or at least with the bridge somewhat convex, the mouth is small, with the lips slightly turned out, especially the lower one, and the outlines gracefully waved, the chin is full and round, the colour of the skin is fair and ruddy, or various shades of brown, the hair is long, smooth, and of various shades.

In the Mongolian variety, the head is almost square, the cheek bones project outwards, the nose is flat, and in the same level with the cheek bones, the arch of the eyebrow is scarcely perceptible, the nostrils are narrow, the edge of the jaw is slightly rounded forwards, the chin is somewhat prominent. The face is broad and flattened, without any distinguishing depressions, the space between the eyes is flat and very broad, the nose is flat, the cheeks round and projecting. The line of the outer eyelids extends towards the temples, while the internal angle is depressed towards the nose, and the upper eyelid at this point is continued into the under lid by a rounded sweep, the eyes thus appear placed obliquely. The colour of the skin is a reddish

* *Decades Craniumum.*

brown, or a lemon yellow; the hair on the chin is scanty, that on the head black and long.

In the Ethiopian, or Negro variety, the head is narrow and elongated, compressed at the sides, the forehead very convex and vaulted, the cheek bones project forwards, the nostrils are wide, the bridge of the nose small and flat, the jaws are much lengthened, the edges narrow and elliptical, the front teeth of the upper jaw are turned obliquely forwards, the lower jaw is strong and large, the whole skull is in general thick and heavy. The face is narrow, and projects greatly in the lower part, the eyes are prominent, the nose spreads out flat, so as to be almost confounded with the cheeks, the lips, particularly the upper one, are very thick, the jaws are prominent, and the chin is retracted. The hair of the head is short, crisp, and curly; the colour of the skin is jet black, varying to brown and reddish hues. Blumenbach has added two other varieties, the American and Malay, as intermediate between those described, and Dr. Prichard seems disposed to separate the Ethiopian variety into three,—the Negro of Central Africa, the Hottentot, and the Papuas of the South Sea Islands.*

We shall now attempt to exhibit a tabular view of the leading races of the great human family, with the localities which they occupy on the earth's surface.

CAUCASIAN.			ETHIOPIAN.	MONGOLIAN.	
INDO-EUROPEAN.		SYRIAN, OR SEMITIC.			
Europe.	Central Asia.	Western Asia.	Africa.	Eastern Asia.	America.
<i>Pelasgi—</i> <i>Greeks.</i> <i>Umbri—</i> <i>Latins.</i> <i>Etruscans.</i> <i>Slavonians.</i> <i>Russians.</i> <i>Poles.</i> <i>Bohemians.</i> <i>Teutones—</i> <i>Saxons.</i> <i>Goths.</i> <i>Scandinavians.</i> <i>Celts—</i> <i>Iberians.</i> <i>Gauls.</i> <i>Belgæ.</i> <i>Britons.</i>	<i>Medes.</i> <i>Persians.</i> <i>Kurds.</i> <i>Affghans.</i> <i>Hindoos.</i> <i>Paharias.</i> <i>Cingalees.</i>	<i>Chaldeans.</i> <i>Babylonians.</i> <i>Syrians.</i> <i>Hebrews.</i> <i>Arabs.</i> <i>Hebrew-</i> <i>African?</i> <i>Phœnicians.</i> <i>Egyptians.</i> <i>Ethiopians.</i> <i>Copts.</i> <i>Berbers.</i>	<i>Yolloffs.</i> <i>Mandingos.</i> <i>Felatahs,</i> <i>(and numerous</i> <i>tribes of Cen-</i> <i>tral Africa.)</i> <i>Shangallas,</i> <i>(Abyssinias.)</i> <i>Kaffres.</i> <i>Hottentots.</i> <i>Papuas,</i> <i>(Polynesias.)</i>	<i>Samoides.</i> <i>Finns.</i> <i>Laplanders.</i> <i>Kamchadales.</i> <i>Esquimaux.</i> <i>Mongols.</i> <i>Tartars.</i> <i>Indo-Chinese.</i> <i>Chinese.</i> <i>Japanese.</i> <i>Koreans.</i>	<i>N. American</i> <i>Tribes.</i> <i>Californians.</i> <i>Mexicans.</i> <i>Peruvians.</i> <i>Brazilians.</i> <i>Patagonians.</i> <i>Caribs.</i> <i>S. Sea Islands.</i> <i>Malays.</i> <i>Polynesians.</i> <i>N. Hollanders.</i>

If we take the population of the whole world at about nine hundred millions, the probable numbers of the respective divi-

* PRICHARD'S *Researches*, 3d Edition.

sions in the above table will be—Caucasians, 407 millions; Ethiopians, 70 millions; Mongolians, 420 millions; Americans and Polynesians, 17 millions.

Under the Caucasian division there are two branches;—the Indo-European consisting of two races, a European and Asiatic, supposed to have originally sprung from the same source, not on account of their similarity as to physical appearance alone, but from the identity of language, the radical foundation of which is the Sanscrit, from whence have sprung the Greek, Latin, Saxon, Sclavonic, and Celtic tongues. On this supposition of the identity of the races, for which there are the strongest probabilities, the effect of a tropical sun on the colour of the Hindoo skin is remarkably evident. The features of the face, and the form of the skull of the Hindoo race, are, however, strictly after the European type. The Syrian or Semitic branch again are distinguished chiefly by their languages, which are founded on the Hebrew and Syriac. The names of some of the ancient races are here, for the sake of connecting the series, included with the existing nations into which they are now blended. Considerable doubt arises with regard to the origin of the ancient Egyptian races, as well as of those of Nubia and Abyssinia. In the north of Africa the descendants of the ancient Lybian race are supposed to have their locality.

The Ethiopian division is, on the whole, a well marked one. It is confined to the central and southern portions of the vast continent of Africa. Supposing that the stream of population came originally from the north of Asia, we are left to conjecture alone, to imagine the route of the Negro race,—whether they descended through the deserts of Arabia, and entered Africa on the east,—or entered on the west, by the mouths of the Nile. No clue to the solution of these questions is afforded by languages, for these differ exceedingly among themselves, and have little affinity with other characteristic tongues. It has been found that the more savage the tribes of any country, the more diversified their languages become. And this may readily be supposed, considering that the isolation of savage tribes is very complete, and that when thus separated, new scenes and objects, and new pursuits, readily suggest to each tribe new and peculiar names and words to designate them. The tint of the skin of the Negro varies from a deep black to a red and tawny yellow. Towards the north of Africa, according to the accounts of travellers, there is sometimes an approach to an admixture of races, indicated by certain tribes in those localities having long straight hair, and features not exactly of Negro character. It is remarkable, however, that on the whole, other races keep distinct from

the true Negroes, and in those exceptions where a mixed breed occurs, such are generally short-lived.*

The Papua race of New Guinea and other islands of the South Sea, partake of the character of the African negro, and by some are supposed to have emigrated thither from Madagascar. They form distinct and separate races in many of those Polynesian islands, where are also found races of the Malay tribe.

The Mongolian division extends over a large portion of the habitable globe, and comprehends numerous races, and considerable diversity of languages.

Towards the extreme north-east of Asia, considerable confusion of races exists, so that some doubts arise regarding their classification under this division. Of this nature are the Finnish and Lapland races.

The American Continent is peopled by numerous tribes, which, though they vary considerably in the form of the skull, and somewhat in the colour of the skin and contour of the features, as well as in diversity of language, yet have, on the whole, such characters in common as lead to the supposition that they are all of one original stock. From whence this stock came is, however, a matter of great uncertainty. Some have supposed the tide of population to have flowed from the north, and hence that America was first peopled from the north-east of Asia. Some Mexican traditions to this effect are still prevalent. Others, again, have imagined Mexico and Central America the first focus of population, from whence, as from a common centre, the various tribes have issued, north and south. This is certainly more agreeable to the analogy of other migrations, where we find that men have gone forth from a centre of comparative civilization, and have gradually degenerated more and more to the extreme savage state, as they receded from this centre. We have ranged the Americans under the Mongolian division, as their structure and general characteristics more nearly resemble the Mongol than the other races. Morton, however, claims for the Americans the character of a distinct and peculiar race.† On the supposition that Central America was the first focus of population, the origin of the race has been traced from the central latitudes of Asia. Though the connexion of language between the inhabitants of the New and the Old World be very faint and imperfect, yet certain traditions and customs, especially a distinct tradition of the deluge, and of

* MOLLIER'S *Voyages*.

† *Crania Americana*, and *Edinburgh Philosophical Journal*. 1845.

the first origin of man from a single pair, prevalent among the American tribes, unequivocally point to a remote period when they formed a portion of the great human family. The late discoveries of ancient cities in Central America, with numerous figures in the form of hieroglyphics, add much interest to, and are, perhaps, likely in the end to throw much light on, the history of this singular people. One fact, however, seems apparent, that no records of a very remote antiquity are to be found throughout the American Continent; and the absence of such would lead to the conclusion that it has been peopled at a comparatively recent era.

The origin of the Polynesian nations is as inexplicable as that of the Americans. They have, on the whole, more of the Caucasian than the Mongolian character; and their aptitude for civilization, as well as the cast of their mental characters, would strongly favour the idea of their descent from a Caucasian race. The question at one time started regarding the extreme isolation of these islands, and the consequent difficulties of their supposed population from such distant countries as any in the Old World, have now been completely set at rest by many well-authenticated instances of canoes and boats making voyages, or having been drifted by tempests, to almost incredible distances.

In tracing up the origin of nations and the dispersion of the human race, where we have but obscure traditions and dim and scattered facts to guide us, we are, at the very outset, singularly reminded that it is only from a limited era of the actual existence of the great human family that our researches can commence. The antediluvian period extended from sixteen hundred to two thousand years*—that is, one-third of the entire duration of the world since it was first tenanted by man. In that period, millions of beings must have existed—nations and dynasties must have flourished—cities were built and arts prevailed—events sufficient to have filled huge libraries with their history must have happened; and it must have taken volumes to have recorded their civil polity and warfares,—yet all that we know of them is contained in a few pages of the Book of Genesis, where a few heads of families merely are mentioned to deduce the genealogy of Noah from Adam. The antediluvian population at the time of the deluge, supposing that the rate of increase was, on an average, similar to that immediately succeeding that event, must have equalled the population of the world at the birth of Christ. The duration of the period was nearly the same; and, though

* The Hebrew computation makes the antediluvian period 1656 years; the Septuagint version, 2262 years.

there was only one progenitor—Adam—in the first era, and Noah and his three sons in the latter, yet this difference at the commencement of a series is but of very small moment; and it is here unnecessary to speculate on the prolonged duration of life, as stated of the antediluvians—a circumstance calculated to increase population at a very great rate. It is unreasonable to suppose that the primeval population was confined to some extensive valley, some extended country, or even to a single continent. They, no doubt, like the post-diluvians, went forth and peopled the earth, founding great nations, and erecting many monuments of human art; yet not a trace of all these is to be seen—not a mound or a brick, or a lettered obelisk, or even a scratch on a durable rock, which can be called antediluvian. No mines or quarries of the earth, no workings above ground or below, not a tomb or a tumulus, not even a bone of our remote progenitors, has ever yet met the astonished gaze of inquisitive mortals; yet tradition is full of the event of their existence, and the awful catastrophe of their destruction, even in the remotest corners of the earth, and among the rudest savages, who, separated thousands of years ago from the central focus, still retain these traditions in their memories, and mould them into their religious observances.* No fact can be better established than the destruction of a primeval race by the deluge. Profane history has repeated allusions to it,† sacred history confirms it; and, tracing up the very earliest known works of human art, we find that the foundations of Babel and Nineveh are laid upon strata which geology explains to us were but the ruins of a pre-existing condition of the earth's surface.‡ The probable cause of this singular oblivion into which the antediluvian race and their monuments have sunk, it is not our present purpose to inquire into. We return to trace the progress of the descendants of Noah.

Taking for granted that the country around Mount Caucasus was the original cradle of the Noachian race, or, at all events, that the north of Asia was the centre from whence population originally flowed, it is curious to trace the progress of the different streams of human emigration. It is natural to suppose that the same impulses which prompt men to emigrate existed then as now—the necessity of enlarging the sphere of subsistence as numbers increase—the feuds and factions of society, and the restless wandering propensities of individuals. These early and partial separations would be gradually increased by the nature of countries,

* HARCOURT on the Deluge.

† Berosus mentions the city of Enos, Noah and the ark. Diodorus Siculus alludes to Adam, and traces up history to the era of the deluge.

‡ AINSWORTH'S *Geological Sketch of Babylonia*.

the intervention of seas and mountains, the modifications of languages and customs, wars, convulsions of the earth, tempests, shipwrecks, and various other casualties.

That there has been from the first a central point of civilization and intelligence, where the arts of life prevailed, and where knowledge and experience were accumulated, is evident from the history of the human race. This centre of civilization has always existed; and though, in the course of time, it has moved onwards and changed its locality, still the accumulated acquirements of ages have been somewhere treasured and transmitted from one generation to another. But it fared differently with those tribes who wandered forth beyond the pale of civilization. They, instead of accumulating knowledge, gradually allowed what they possessed to slip away. Any offset from these became more and more ignorant, till at last the remote tribes sunk into the lowest state of barbarism. That this process of progressive degeneration actually took place we have every reason to believe, because, in tracing the descent of races and their progress from the centre of large communities, we invariably find the descendants in a lower scale of civilization than those from whom they sprung. Thus the Mexicans and Peruvians lived in cities amid all the arts of life, while the Patagonians, at the extreme verge of the continent, roamed the woods as wretched savages. The tide of population in Africa evidently appears to have extended from north to south; we accordingly find, at the extremity of that continent, the most degraded of human beings—the Kaffres and the Bechuanas, the latter as ferocious and ignorant as the beasts of the forest, with intellects so grovelling as not to possess an idea beyond the clods of earth before them, destitute of the slightest notions of any kind of higher intelligence, and even wanting in their language a word to express a God or Spirit.*

These are remarkable circumstances in the history of the human race. They afford a decided refutation of the visionary dreams of those who expatiate on the virtues of savages, or who suppose that, independent of extrinsic aid, a nation can rise from this condition into a state of civilization.

But, independent of adventitious circumstances, there appears to have been a destiny which presided over the early distribution of mankind. Thus, while one race passed calmly through the fertile plains of middle Asia, and another struck westward into the isles and countries of Europe, a third, bold and restless, and hardy as the arid and elevated steppes over which they clambered, scattered themselves along the whole north-eastern portion of Asia. While the Ethiopian took to the torrid sahaaras and broil-

* *MOFFAT'S Missionary Scenes and Labours in Southern Africa*—1842.

ing sun of Africa, there to be melted down and enfeebled by the climate, the white man's destiny led him to the varied, and often severe sky of Europe, there to be disciplined by the elements, and his enterprize and ingenuity to be sharpened and tried by difficulties. Between the Mongol race and the country over which they spread, there seems to have been a close affinity.

"If," says Dr. Prichard, "physical circumstances, climate, and local situation, giving rise, as they do, to a remarkable peculiarity in all the other productions of nature, have ever power to call forth those variations to which our species is prone, we should expect to find some proofs of this influence in the region so remarkably constituted, which appears to have been the cradle, and, for many ages, the dwelling place of all these nations. The north of Asia differs not more widely from Europe, in respect to the moral character and the social state of the nations found in it, than in the natural productions of the soil; and the difference is still greater when we advert to the great central steppe, the highest region of the world, where dry and cold plains of vast extent are covered only with saline plants, and with animals endued with a habit and structure fitting them for the local circumstances under which they are destined to exist."

Fierce, hardy, warlike, and restless, they roamed as hunters or nomadic shepherds, the dread and terror of the peaceful nations around; but even when they descended into the fertile plains, built cities, and applied themselves to the arts of civilized life, still their peculiar character did not forsake them. Amid the fertile empire of China, and the beautiful islands of the Chinese seas, congregated in vast cities and very ancient communities, they still remained a cold, exclusive, distrustful, and calculating people. At a very early period they reached a certain pitch of civilization, in all that regards the physical arts of life, but here they have ever remained stationary—their thoughts have never soared above the level of animal existence, ignorant in science, commonplace in philosophy, dull in imagination, low in morals, selfish in feeling, and cold to an extreme in their idolatrous theology; without energy of thought or action, they live the dull round of stagnant existence.

The Negro race again—the sable children of the torrid zone—seem formed to bask in the utmost ardour of the tropic sun. In regions where other beings only pant and die, they enjoy the full relish of life. Their black skin, full of innumerable pores, is the best medium for radiating heat and exhaling moisture; transported into any region where the tropic sun bears sway, they thrive and multiply, but in colder countries they languish and die. Over the vast regions of Africa they swarm in unknown numbers. A light cheerful disposition, patience of fatigue, fidelity, and gentleness of manners, form their characteristic dis-

position, when not debased by the ferocity of unmitigated savage life. But they have ever existed as scattered tribes, without wisdom to combine into regular and permanent communities, or energy to undertake any great or comprehensive system of civilization. Even the simple arts of life are to them almost unknown. They have little or no agriculture. They have done nothing in architecture. Navigation is to them unknown, beyond their creeks and bays. They have no literature, and, with innumerable dialects, they have no standard language. Their minds are low and grovelling, deformed by the belief of a demoniacal theology, or, in many cases, devoid even of the idea of a God or a spiritual existence.

How different is the aspect, when we turn to the Caucasian stream of population, and contemplate its varied and eventful progress! Can climate and locality here have been the all-presiding influences? There is no doubt but some of the fairest portions of the earth fell to the lot of this people. The rich plains and genial skies of western Asia, and the varied borders of that most celebrated of all inland seas—the long-extended Mediterranean, whose placid waters and numerous bays have afforded greater facilities for the extension of population, and the transport of merchandize, than any other locality on the face of the globe,—these were all favourable circumstances. But “the cloud by day and the pillar of fire by night” have also all along accompanied this favoured race. We have seen, from the examples of the other races, that man, if left to his own resources, soon comes to a pause in his career, or more frequently goes on in the progress of degeneration, until he arrives at a level with the beasts of the field around him. It is only when illumined by a light from heaven that the mind of man expands into its full energies. The natural impulses of powerful intellect, bold fancy, energetic purpose, and high and aspiring achievements, will carry him onwards in the career of improvement; but unless they are guided and encouraged, and directed to nobler aims and higher aspirations, than it would ever enter into the heart of man to conceive, all would finally crumble into dust, and pass away into baseless visions. Every thing that we can call great and beautiful and fair and humanizing on earth, has been achieved by this favoured family of mankind. Who has scanned the firmament and dived into the immensity of space, unravelling the intricate laws which uphold the planetary orbs, imparting to our minds wonderful conceptions of the starry host of heaven? Who fearlessly launched the strong-built bark to circumnavigate the globe, and made us acquainted with every nation, kindred, and tongue? Who has explored the wonders of the earth, the sea, and air, and detailed the curious history and mechanism of the innumerable forms with which the elements teem? Who has dived into the mysteries of

thought, and explained the operations of the impalpable mind? Who has sung us songs to elevate the soul and raise the feelings above the gross realities of earth? Who has caught the images of external beauty and fixed them for our admiration on glowing canvass, or moulded them in durable marble? Who has raised our monumental domes and temples in which the living and true God receives unpolluted worship? All have been the achievements of the white man, under the guidance of Providence. Yet, in a population exceeding nine hundred millions, the proportion of this race, even at the present time, does not nearly amount to one-half. It is singular to think to what a partial spot of earth, and to what a handful of human beings, the first seeds of sacred knowledge were confided, and with what rapid pace the tide of emigration must, in the meantime, have been flowing over the dark and unknown regions of the earth, peopling them with beings who were sinking, as rapidly as their numbers multiplied, into the lowest stages of barbarism. After the introduction of a more perfect and distinct revelation, it is no less singular to think of the many centuries of ignorance and turbulence and crime, ere the benign influence of its precepts, and the renovating and spiritual nature of its doctrines, began to operate to any extent on the human race. We can only account for such circumstances by reflecting that a few centuries, or even thousands of years, are as a day compared to infinitude, and that such periods, long and dreary as they may appear to the eye of the isolated and fugitive mortal, are not a single hour longer than what was requisite to consummate the mighty schemes of Omnipotence!

"Go forth and replenish the earth," was the mandate both of nature; and of God and in nothing may we view the all-comprehensive arrangements of the Deity more strikingly illustrated than here—that the knowledge imparted from heaven to man should, for a season, be fostered and accumulated in particular regions, and among certain communities, from whence, in due time, a reflux action should commence, and this illuminating knowledge should go forth into the darker regions of the earth, and visit the countless wanderers from the parent stock, who roam in ignorance, not only of the common arts of life, but even of that Being who formed the earth on which they dwell, and of those high destinies for which man was called into existence! The expression of that zealous missionary Campbell, that the poor African looked on the sun with the eye of an ox, is no less true than touching; and who can read without emotion the following account of the southern tribes of Africa, as given by another missionary, in a passage to which we have already alluded. Mr. Moffat says of the Bushmen of South Africa:—

"It is impossible to look at some of their domiciles without the inquiry involuntarily arising in the mind—are these the abodes of human

beings? In a bushy country they will form a hollow in a central position, and bring the branches together over the head. Here the man, his wife, and probably a child or two, lie huddled in a heap on a little grass in a hollow spot, not larger than an ostrich; but when bushes are scarce they form a hollow under the edge of a rock, covering it partially with reeds or grass, and they are often to be found in fissures and caves of the mountains. When they have abundance of meat they do nothing but gorge and sleep, dance and sing, till their stock is exhausted. But hunger soon again drives them to the chase."

These beings had no ideas of anything beyond this world. Several interrogated by the missionaries Schmelin, Campbell, and Moffat, declared that they had no idea whatever of a God or Devil, or any Spirit, of a future state, or immortality of the soul, and yet they had in general acute intellects and excellent memories. Africaner, a chief of the Bechuana nation, after conversion became a sincere believer and deep thinker. Being asked what his views of God were before he enjoyed the benefit of Christian instruction, he replied, that he never thought any thing of these subjects, that he thought about nothing but his cattle. He admitted that he had heard of a God (from Christian colonists), but he stated that his views of Deity were so erroneous that the name suggested no more to his mind than something that might be found in the form of an insect, or in the lid of a snuff-box. Dr. Vanderkemp says of the Kaffres:—"If by religion we mean reverence for God, or the external action by which that reverence is expressed, I never could perceive that they had any religion or any idea of the existence of a God. They have no word in their language to express the idea of the Deity." They worship nothing in heaven or earth, and no fragments or ruins remain that could indicate that the fathers knew anything beyond their descendants.

Questions as to a superintending Providence being put to Africaner, whose memory was tenacious as his judgment was now enlightened, he answered,

"We had no idea that an unseen eye saw us, or that an unseen ear heard us. What could we know beyond ourselves or of another world, before life and immortality were brought to us by the word of God." This declaration was followed by a flood of tears, while he added, "You found us beasts, and not men."

After Africaner's mind was irradiated by the revelation of the Sacred Volume, however, Mr. Moffat thus states the remarkable impulse given to his active intellect:—

"Often have I seen him under the shadow of a great rock, nearly the livelong day, eagerly perusing the pages of Divine inspiration, or in his hut he would sit unconscious of the affairs of a family around, or of the entrance of a stranger, with his eye gazing on the blessed

book, and his mind wrapped up in things divine. Many were the nights he sat with me, on a great stone at the door of my habitation, conversing with me till the dawn of another day, on creation, providence, redemption, and the glories of the heavenly world. He did not confine his expanding mind to the volume of revelation, though experience had taught him that it contained heights and depths and lengths and breadths which no man comprehends. He was led to look upon the book of nature; and he would regard the heavenly orbs with an inquiring look, cast his eye on the earth beneath his tread, and, regarding both as displays of creative power and intelligence, would inquire about endless space and infinite duration. I have often been amused," adds Mr. Moffat, "when sitting with him and others, who wished to hear his questions answered, and descriptions given of the majesty, extent, and number of the works of God—he would at last rub his hands on his head, exclaiming, 'I have heard enough; I feel as if my head was too small, and as if it would swell with these great subjects.'"

There is a suggestion made by Sir Humphry Davy,* that the original dispersion of the human race, and its division into several marked varieties, may be so far beneficial to mankind, simply by affording a means of the subsequent admixture of races. In this way the degenerating effects of too close intermarriages may be prevented, and the excess of any marked peculiarities descending to and accumulating in particular offsprings may be interrupted. Besides, he supposes that refinement and civilization may be carried too far, so as to produce too great an excitability of constitution, and an effeminacy and corruption of habits and morals,—but an intermixture with a barbarous race again restores the equilibrium. The past history of the world has certainly so far confirmed the latter supposition. The history of nations hitherto has been a gradual advance to the extreme point of intelligence, refinement and luxury, then a gradual decay, till at last they have been overrun and subdued by some more savage but more powerful tribe, which has ultimately become incorporated with the conquered. But this intermixture, as has been already remarked, appears to have been confined to the various tribes and subdivisions of each particular race; there has been no general or permanent amalgamation, and nothing can prove this more completely than the fact that the great primary varieties remain distinct and separate to the present day. Undoubtedly, however, admixtures of the same primary races, in various stages of civilization, have frequently taken place, and thus it has been supposed that the repeated amalgamation of different tribes of Saxons, Normans, and Danes, among the original Celts of Britain, may have contributed to the mental and physical superiority of its inhabitants. The present taste for emigration

* *Last Days of a Philosopher.*

may be also one of those salutary operations of nature by which the effects of a too refined and artificial existence may be remedied; and thus our crowded and luxurious cities are yearly pouring out their thousands, who spread themselves over the uncultivated wilds of America and Australia.

We mark, however, a difference between the early and the later migrations of the human race. Formerly it was an operation of division and dispersion; feuds and animosities, no less than seas and mountains, rent nations asunder, and new languages as well as different habits and feelings kept them irretrievably separate. With emigration, too, for the most part, followed ultimate degradation. Seldom indeed did colonies go forth carrying improvement and increased civilization in their train,—so imperfect were the means of communication to distant regions, that when once a colony or a straggling party went forth from the parent stock, they were lost and forgotten. The multiplication of languages, and the excessive division and dispersion of tribes and nations, impeded vastly the acquisition of knowledge, and much of what had been accumulated by experience or locally acquired, was ultimately lost to the world.

A very different state of things seems now to have commenced. The human family seems to be consolidating rather than dispersing. There is no such event as the origination of a new language; and nations, if they are not actually uniting as regards territorial bounds, are becoming more and more one in opinion and in peaceful unanimity.

The extraordinary facilities of intercourse between nations, both by land and sea—the great modern triumph of art over space and time—is producing wonders in this respect. Who could have dreamed, two centuries ago, of crossing the Atlantic in twelve days, or of traversing the island of Great Britain in nearly as many hours! The time was, in the annals of the human race, that the emigration of Britons to North America would have given rise to a distinct colony of human beings, having a different language and different manners from the parent stock; but a common literature, common tastes and interests, and incessant intercourse, have all tended to preserve them the same,—a vast nation, now far exceeding in numbers that of the parent stock at the period when they separated.

It is scarcely within the bounds of probability to conceive another complete state of isolation over the habitable globe. Changes will inevitably occur—wars and commotions, and temporary interruptions; but hope bids us look for that period when knowledge shall extend from sea to sea, and illuminate all corners of the world. Yet pleasing as it is to contemplate this probable diffusion of intelligence, the analogies of the past, had

we no better grounds of hope, are not without forebodings for the future. Hitherto we have seen the nations of the earth rise in succession into power and intelligence, and, having obtained a maximum of perfection, sink again into sloth and ignorance. The tide of intelligence and national greatness has flowed in successive waves,—here swelling out for a time, and again subsiding,—instead of pouring onward in an uninterrupted and increasing current. Where are now the mighty cities and empires of the earth? Babylon is forgotten. Nineveh, “that great city,” lies silent, and undistinguished from the wastes around. Thebes and Luxor possessed their thousands of busy, ingenious, and refined inhabitants. All the arts calculated to benefit and adorn life were intimately known and practised by them. Neighbouring nations came and drank at the fountains of their knowledge. Merchants from afar crowded their marts with costly spices, oils, and precious stones. They lived in luxury, and reared mighty monuments to perpetuate their greatness, and palace-tombs to enshrine their embalmed bodies. But time has scattered all to oblivion, and the rude wandering Arab stalks over the solitary desolation. Where are the once numerous cities, like swarming hives, of Asia Minor? Where the Etruscan capitals, known only to posterity by the remnants of their mouldering tombs? Where the Greek and Roman commonwealths, where taste and refinement, fostered by unbounded wealth and power, rose to the most exquisite pitch of excellence? All are faded from the earth, and vanished as if they had never been. The history of the progress of nations is something like that of the individual. They begin with a youth of struggles,—increase to a mature age in the path of improvement,—but some law of their constitution forbids a farther advance, and they gradually sink into the dotage and imbecility of old age. Nor, perhaps, would a more permanent prosperity be compatible with the destiny of man. Such an universal diffusion of intelligence—such certain means of acquiring knowledge—such an uniform progress of society, would interfere with that probationary arrangement—that mixture of good and evil—which we are led to believe is the lot of man while upon earth.

If ever there was an era which held forth the promise, by the operations of natural means, of a general diffusion of intelligence over the globe, it is the present. The high perfection of the arts—the facilities of rapid conveyance—the influence of printing, and the awakened energies of society, all point in this direction. That the diffusion of true knowledge, and the awakening of an industrial activity in the general habits, with an expertness and proficiency in all the useful arts of life, must tend to benefit the great mass of society, there can be no doubt.

But we must beware of allowing ourselves to imagine that man, in the aggregate, is a being capable of unlimited improvement, or that all the knowledge to which he can possibly attain will ever raise the mind of the species above that point at which the Creator fixed its limits. With his present faculties of mind, the physical attainments of man must have a boundary, which it is by no means difficult to conceive or even to define. These faculties are adapted for the apprehension of effects or phenomena—not for the comprehension of ultimate causes. With all our knowledge of the facts of nature, we are totally in the dark as to a single cause. We speak of gravity and attraction, and organic forces—but these are mere sounds to stand in the place of actual knowledge. As long as effects alone are cognizable by man, he may go on accumulating his store of information, varying his pleasures in the comforts and necessities of life, and diversifying his imaginative powers by turning these into various channels; but in the meantime his mind has not made a single step beyond its original boundaries—it has acquired a wider field to expatiate upon, and more numerous facts and analogies on which to ruminate, but its conceptions of ultimate causes, and its powers of reasoning remain the same. The probability is, that as great and powerful minds existed in times past as ever may yet fill the future records of fame. The mind of Socrates was as great as that of Newton, though the former was ignorant of the fact that the planets rolled round the sun in certain orbits and in certain periods. Archimedes probably had as much ingenuity of invention, and practical sagacity as Watt; and Homer luxuriated in his fertile fancy with as exquisite a richness as Shakespeare.

To conclude: A rich mine of research still awaits the student of ethnography. The late venerable Blumenbach first led the way; Prichard followed with all the ardour of youthful research, and, not allowing the subject to escape him through the anxious labours of a professional life, has in his late edition of his original treatise accumulated a vast store of highly interesting facts and speculations. The later volumes are particularly valuable, as containing a digest of the labours of several German writers on the subject.

Of the splendid monograph of Dr. Morton on American craniology, it is but justice to say, that, both in the letterpress and numerous accurate figures of native skulls, he has left nothing to be desiderated in the physical history of that interesting and now fast diminishing family of mankind.

We hail, too, the formation of the Ethnographic Society of London, and hope that its labours will tend to elucidate many facts in the history of races and nations.

ART. VIII.—KOZMOZ. *A General Survey of the Physical Phenomena of the Universe.* By BARON ALEXANDER VON HUMBOLDT. London, 1845.

WERE the republic of letters to alter its constitution, and choose a sovereign, the intellectual sceptre would be offered to Alexander Humboldt. The New World would send deputies across the Atlantic to assist at his installation, and the princes and the philosophers of every clime,—the autocrats of the East and the democrats of the West,—would hail the enterprising traveller who trod the mountain crests of Europe, ascended the American Cordilleras, and explored the auriferous beds of the Uralian chain. In this estimate of our author's position, we have not forgotten the renown of less popular though brighter names; but it is in the universality of genius, in the wideness of its range and the elevation of its flight, more than in its native originality and power, that we must look for the qualities of an intellectual leader. Leibnitz would have outstripped Newton in a contest for the empire of knowledge; and, as competitors for the throne of mind, Cuvier would have outdone Laplace. In the world of instinct, where physical energy alone is appreciated, we witness another rule. The sagacity of the elephant has not ranked him above his four-footed associates, nor has the wisdom of the raven been held a sufficient title to royal honours. The paw of the lion has vindicated his claim to the throne of the forest; and in the beak and talons of the eagle we recognize his right to the supremacy of the air.

The title of our author to such distinguished pre-eminence will be readily acknowledged by all who have followed him in his brilliant career as a traveller and a naturalist; and those who have known him only by the voice of fame, will recognize in the present work a mind richly gifted by nature, deeply versed in the science and literature of the age, stored with the varied knowledge which study and observation can supply, exercising the highest powers of combination and analysis, intensely alive to the beauty and grandeur of the material world, and thus qualifying its possessor to be the historian and the interpreter of inorganic nature,—the expounder of her phenomena and laws,—the high-priest of her holiest mysteries, and the most enthusiastic yet humblest worshipper at her shrine.

It would be a task at once easy and agreeable to give a critical analysis of a work so remarkable both from its subject and from

its author ; but such an analysis, unless on a scale which our allotted space could not permit, would be meagre and unsatisfactory, and would fail to convey to the reader any adequate idea either of the varied interest of the subject or of the talent and research which the author has brought to its discussion. We shall, therefore, endeavour to give a popular abstract of *Kosmos*, separating what is speculative from what is true, contemplating great truths in their more striking phases, and thus persuading the reader to enter upon the study of the work itself, and of those branches of knowledge of which it is at once the blossom and the fruit.

But before commencing this important task, we are anxious to discharge the preliminary duty of giving our readers some information respecting the life and writings of Baron Humboldt, of which we believe no account is to be found in any English work. If the biography of distinguished men possesses a high interest when the grave has closed over their mortal remains, that interest is not less exciting when the sage is yet sensible to the voice of praise, and can receive the homage of fellow labourers who have toiled along with him, or of affectionate disciples whom he has instructed and amused. If this instruction and that amusement have been derived from the establishment of great truths, from the description of new and striking phenomena, or from the development of general laws,—lifting the soul from nature to its Author, and preparing it for its final destination,—we know not whether the teacher or the taught* will have most reason to rejoice. In this noble enterprize for the abatement of intellectual pauperism and the relief of mental indigence, there has been no such successful labourer as Baron Humboldt. From every zone of the terraqueous globe he has gathered and presented to us all the flowers and fruits of knowledge. On its giant mountain tops, whether tipped with fire or with snow ; on its verdant and flowering savannahs, on its burning plains, and in its dark and rugged caverns, he has studied and embalmed nature in all her loveliness and sublimity. Every European community has drawn into its vernacular streams the pure fountains which he has opened up for their use ; and now in the seventy-sixth year of his age, and at the close of his intellectual life, he has bequeathed to posterity, in the work before us, the light and heat of his bright and glorious sunset.

Frederick Henry Alexander Humboldt was born at Berlin on the 14th September 1769, and was a younger son* of a noble,

* His elder brother, who was born in 1767, was Charles William Baron Humboldt, celebrated for his literary acquirements. He was Minister of State, Chamberlain, and Privy Councillor to the King of Prussia.

wealthy, and highly esteemed family in that city. He was placed under the charge of M. Kunth, at whose table he met with the most distinguished philosophers of Prussia. In such society, his early passion for science was encouraged, and with such assistance, he made rapid progress in all the studies with which he was occupied. In the public schools of Berlin, Göttingen, Frankfort, and Hamburg, he completed his course of instruction; and had he now coveted the honours and the wealth of office, the influence of his family, and the fame of his talents, would have launched him on the brightest career. His ambition, however, was for scientific renown, and he had no sooner acquired the general knowledge which lectures, and books, and museums could supply, than he hastened to give it form and substance by studying Nature in those grand phases in which she displays her beauty and unfolds her secrets. For this purpose, he travelled through Germany, Holland, England, and along the two banks of the Rhine, exploring the natural history and geology of these interesting regions; and upon his return to Prussia in 1790, he published his first work on *the Basalts of the Rhine*. Notwithstanding the reputation for geological knowledge which he thus acquired, he repaired to Freyberg, to extend and perfect it under the celebrated Werner, who had attracted pupils from every part of Europe. Here he studied, in company with the illustrious Baron von Buch, the internal structure of the earth, as exhibited in its minerals, its ores, and its fossils; and in these pursuits he was led to examine the botany of mines and caverns, and to publish the results of his observations in his *Specimens of the Subterranean Flora of Freyberg*, which appeared in 1793.

The Prussian Government was not long in discovering the fitness of our author for different offices of the State; and it was to his science, and not to his rank, that he owed his nomination as Assessor to the Council of Mines at Berlin, and his subsequent appointment to be Director-General of the Mines in the principalities of Anspach and Bayreuth. These occupations, however, did not afford scope enough to his genius and enterprize. His ardour for scientific research could not brook the interruptions of professional toil, and he longed to throw off the harness of official labour, which had hitherto encumbered him. Schemes of foreign travel had long occupied his mind, and he now sought to prepare himself for their right and speedy accomplishment.

The discoveries of Galvani had about this time surprized and delighted the scientific world. In the convulsive twitches of a skinned frog, when the nerve of its leg was touched with a knife, the anatomist of Bologna had found the elements of a new science. The ardent youth of Italy and Germany rushed into this inviting field of inquiry in quest of fame, and next to Volta, Humboldt

was one of the most active labourers. He not only repeated Galvani's experiments, but made a number of painful ones on himself, which left behind them very disagreeable effects. He made wounds on his back, by means of cantharides, that he might apply more closely to the muscle the two metals of the Galvanic circle. The results of his researches were published in 1796, and such was the estimation in which they were held, that the illustrious Blumenbach enriched with his notes the French translation, the first volume of which appeared in 1799, under the title of *Experiments on Galvanism, and in general on the Nervous and Muscular Irritation of Animals*. No sooner had the original work issued from the press, than its author made the tour of Italy, visited Switzerland, and with his barometer and his hammer, explored the mountainous regions of that interesting land. Returning into Prussia, his passion for visiting distant countries again seized him, and he set out for Paris in 1798, with the double object of studying its collections of natural history, and of profiting by the society of the illustrious men who then adorned the metropolis of France. Here he formed an intimate friendship with Cuvier, Arago, Gay Lussac, and the other high-priests of the Institute, working along with them in their observatories and laboratories, and thus qualifying himself for those researches in foreign climes which he was destined to pursue with such ardour and success. Among the various plans of travel which pressed themselves upon his notice, he seems to have preferred the circumnavigation of the globe along with the unfortunate Captain Baudin; but this scheme was soon abandoned; and dazzled probably by the high expectations of foreign conquest which then occupied the French mind, he conceived the idea of following Buonaparte in his expedition to Egypt, of exploring Arabia and the shores of the Persian Gulf, and of visiting the British territories in India. Various causes, however, frustrated his designs. A better field had been assigned to him by a higher power. Vast regions, unvisited by science, stretched beyond the Atlantic,—teeming with organic and inorganic life,—beautiful in their woods and their valleys,—sublime in their rivers, their table lands, and their mountains, and basking under an equatorial sun,—crossing and recrossing their zenith in its annual course,—and summoning from their fertile soils all that can please the eye and satisfy the wants of man. For such a field of enterprize the genius of Humboldt was pre-eminently adapted, and he was led by a succession of disappointments, as fortunate for science as for himself, to explore that interesting portion of the New World—the Spanish territories of South America—which had hitherto been visited but for the purposes of commerce or of war.

During his residence at Paris, he became acquainted with

Aimé Bonpland, who was to have accompanied Baudin, as naturalist to his expedition; but as the war, which had broken out in Germany and Italy, obliged the Government to withdraw the funds which had been voted for it, our two travellers were induced, by M. Skioldebrand, the Swedish Consul, who was passing through Paris in the charge of presents to the Dey of Algiers, to undertake a journey to Africa. Having been long resident on the coasts of Africa, and possessing much influence with the Dey, he agreed to procure for his friends every necessary facility for exploring those parts of the Atlas Chain which had not been visited by M. Desfontaines, and to give them a free passage on board the *Jaramus* frigate, appointed to convey himself from Marseilles to Algiers, at the end of October. Our two naturalists lost no time in repairing to Marseilles, but after waiting two months for the expected vessel, they learned that it would not arrive till spring, and being unwilling to winter in Provence, they took their passage on board a small Ragusan vessel, which was about to sail for Tunis. Fresh disappointments, however, awaited them; for on the very eve of embarkation, they learned that the Government of Tunis had maltreated the French in Barbary, and that all who had arrived from a French port had been thrown into dungeons. Thus driven from their favourite project, they resolved to spend the winter in Spain, with the view of embarking in spring, either from Carthagena or Cadiz, if the political relations of the East should permit them. In travelling through Valentia and Catalonia, they visited the ruins of Saragossa, and those of the ancient Saguntum, and on their arrival in Madrid, they were received with the highest distinction, both by the Spanish savans and by the members of Government. The Sovereign of the Court of Spain gave them the extraordinary permission to travel freely over all the colonies of Spanish America, and to visit the Marianne and Philippine Isles on their return to Europe by the Asiatic Archipelago and the Persian Gulf. This great privilege was received with gratitude and joy; and after making the necessary arrangements, they quitted the capital, in the middle of May, and traversed a part of Old Castile, and the kingdom of Leon and Galicia, on their way to Corunna, now blockaded by the English squadron, where they were to embark for Cuba. During a delay which took place of twelve days, they prepared the fine collection of plants which they had collected in the hitherto unvisited valleys of Galicia, and studied the numerous specimens of fuci and mollusca which the north-west sea leaves in such abundance upon the rugged coast which bears the light-house of the tower of Hercules. The sloop Pizarro, which was to conduct them to the New World, set sail on the 5th of June, and after

tarrying some days to permit the travellers to visit the peak of Tenerife, it arrived safely at Cumana, the capital of New Andalusia, on the 16th July 1799.

After verifying his instruments, Humboldt travelled through New Andalusia, and Spanish Guiana, determining the geographical position of the most important stations; studying their botany, mineralogy, and geology; and observing the more interesting atmospheric phenomena, as well as the manners and customs of the inhabitants. From Cumana they visited the interesting salt marshes of the peninsula of Araya, where springs of naphtha, flowing from the mica slate, rise from the bottom of the sea in jets and air-bubbles, covering with an oily film the surface of the sea to more than a thousand feet of distance, and projecting its odour into the very interior of the peninsula. Here they saw for the first time the marvellous *piedras de los ojos*, or *stones of the eyes*, which are gathered in abundance at the point of Cape Araya. These bodies are regarded by the natives as both a stone and an animal. When picked from the sand they are motionless; but when placed singly on a polished surface, and wetted with lemon juice, they begin to move. These round stones are from one to four lines in diameter, having one surface plane and the other convex; and when placed in the eye, the animal is said to turn round and expel every foreign substance. They are in reality the porous calcareous opercula of round univalve shells, which effervesce with lemon juice, and consequently move, on the principle of Barker's mill, by the reaction of the issuing carbonic acid, just as, in the *enchanted ovens* of European superstition, the loaves sometimes move in a horizontal direction, by the reaction of the carbonic acid which they disengage.

In their excursion to the mountains of New Andalusia, the seat of the missions of the Chayan Indians, new beauties and wonders awaited them. There the vegetable forms of the torrid zone appeared in all their majesty. Huge masses of tropical vegetation, adorned with the most beautiful melastomas, first met their eye. The tops of the trees, intertwined with lianas, were crowned with long wreaths of flowers; and round their trunks they first saw the extraordinary phenomenon of a gramineous plant (*carice*), climbing like a liana eight or ten feet, and forming festoons which cross the path, and float in the wind. Every where are the trunks of the trees concealed under a thick carpet of verdure; and were the orchideous, and other plants which a single American fig-tree nourishes, carefully transplanted, they would cover a surface of great extent. The same lianas which creep along the ground rise to the tops of the trees, and pass

from one to another at the height of more than an hundred feet. In the valley of Arenas there lived a labourer, Francisco Lozano, who, when his wife had fallen sick, suckled the child with his own milk. In order to quiet the infant, he took it into his bed and pressed it to his bosom; and though he was thirty-two years old, he had never remarked till that day that he had milk. The irritation of the nipple, and the action of the infant's lips, caused the milk to accumulate. The breast of the father increased in size, and yielded abundance of thick and sweet milk, with which he suckled his child two or three times a-day for five months. The ancients speak of the milk yielded by the he-goats of Lemnos and Corsica; and Humboldt himself saw in Hanover a he-goat, which was milked every other day during a great number of years, and yielded more milk than any of the female ones.

The next scene of interest encountered by our travellers was the crevice of the mountain Cuchivano, bounded by perpendicular walls of alpine limestone; and in which are two spacious but inaccessible caverns, from which flames occasionally rush, rising several hundred feet, illuminating the adjacent mountains, and sometimes attended with a dull and long-continued subterraneous noise. These caverns, which are inhabited by nocturnal birds, occur in a wall of rock, rising perpendicularly to the height of 800 toises (4800 feet.)

Among the mountains of Caripe, our travellers visited the celebrated cavern of the *Guacharo*, which the inhabitants of Cumana indicate to strangers as equally marvellous with the eye-stones of Araya, and the milk-giving labourer of Arenas. This extraordinary cavern is pierced in the face of a vertical rock, in a lateral valley from that of Caripe. Its entrance, facing the south, forms a vault seventy-two feet high and eighty wide. Trees of gigantic height crown the rock above. Plants of great beauty spring from the dried clefts of the rocks, while creepers, interwoven in festoons, adorn the opening of the cavern. This luxuriant vegetation extends into the vestibule of the grotto, and is continued for thirty or forty paces. Measuring their course by a cord, they advanced about 430 feet by the light of day; and when the light began to fail, they heard from afar the hoarse sounds of the nocturnal birds, or *guacharos*, which inhabit in thousands the interior of the cavern, and utter the shrillest and most piercing cries. The nests are fifty or sixty feet above their heads, in holes like funnels, with which the roof of the cave is perforated like a sieve. The spread of their wings is $3\frac{1}{2}$ feet; and as their eyes cannot bear the light of day they quit the caverns at nightfall, and especially when the moon is shining. About mid-summer the natives kill them in thousands, and strip them of a portion of

fat which lies between their legs, and which, when melted, forms a semi-liquid transparent oil, without smell, and keeping above a year without becoming rancid. This cavern gives birth to a small river which is the origin of the Caripe. The guides refused to conduct the travellers farther than 1458 feet from the mouth; though a Bishop had, in former times, penetrated so far as 2500 feet, without reaching its termination.

While preparing for their journey to the Oroonoko, an accident had nearly proved fatal to them both. In crossing the beach at Cumana they were attacked by an infuriated Zambo, an Indian naked to the waist, who, coming up behind, aimed at Humboldt a blow with a huge club-shaped bludgeon: The baron, however, escaped from the stroke by a sudden leap towards the left hand, but Bonpland, who did not see the assailant, received a blow above his temple, which levelled him to the ground. Having raised his friend from the earth, they both rushed upon the Zambo, and a personal conflict took place, in which the Indian drew a long knife from his pantaloons, and would infallibly have slain one or both of his opponents, had not some Biscayan merchants come to their rescue. The villain was with some difficulty secured, but afterwards made his escape by breaking out of the Castle of St. Antonio.

A meteorological phenomenon of universal interest occurred during what is called the season of winter, from the 18th October to the 3d November 1799. A reddish vapour arose at nightfall, and diffused itself in a few minutes over the azure sky. This vapour increased in thickness from the 20th October to the 3d November. The usual cooling breeze ceased, and the atmosphere appeared as if it were on fire. The parched ground cracked. Huge black clouds enveloped the mountains, and extended to the zenith. About four o'clock, hoarse, distant and interrupted thunder was heard over-head, and at the moment of the strongest electric discharge, at a quarter past four, two shocks of an earthquake took place, at an interval of fifteen seconds. Mr. Bonpland, while examining plants, was thrown on the floor, and Humboldt felt the shock strongly, though lying in a hammock. The people, filling the air with their cries, crowded into the public square, dreading the repetition of a catastrophe which, only twenty-two months before, had almost destroyed their city. A third but a slighter shock again occurred at nine in the evening. The dip and variation of the needle were influenced by these earthquakes,—a mechanical effect, probably, though the magnetic intensity is on such occasions considerably affected. The red vapour disappeared on the 7th; and on the 11th November the most extraordinary luminous meteors were seen towards the east. Thousands of bolides and falling stars, moving regularly from

north to south, succeeded each other during four hours, filling a space extending 30° on each side of the true east; the bolides, which were seen on the frontiers of Brazil, a distance of 230 leagues, seemed to burst as by explosion, the largest having a diameter exceeding a degree, disappearing with scintillation, and leaving behind them phosphorescent bands, 15' or 20' broad. The falling stars had a distinct nucleus as large as Jupiter's disc, from which started sparks of brilliant light.

Leaving Cumana on the 16th, they landed at La Guayra, the port of Caraccas, which they reached on the 21st November by an extraordinary road of three leagues, more wild and picturesque than the most remarkable passes of the Alps. This interesting city, enjoying the climate of a perpetual spring, has been compared to the terrestrial paradise by a native writer, who has recognized in the Anauco and the other small streams which cross the line, the four rivers of the Garden of Eden. Humboldt has described it as he saw it in 1800, with its eight churches, five convents, its wide streets, and spacious squares; but, in consequence of the delay in the publication of his personal narrative, he has recorded in the same chapter its utter destruction by the terrible earthquake of the 26th March 1812. This fatal day was hot and calm, with a cloudless sky, and from its being Holy Thursday, a great part of the population had assembled in the churches. A shock powerful enough to toll the bells occurred at 4h. 7', and during five or six seconds the ground seemed to heave up like a boiling liquid. Ushered in by a tremendous subterranean noise, two shocks from opposite directions united their destructive powers. The undulations crossed each other, and nothing could resist the vertical motion from beneath. The whole town was instantly overthrown, with the exception of one street, which was rendered uninhabitable, and between nine and ten thousand persons, not including those who afterwards perished from their wounds and want of food, were buried under the ruins of the houses and churches: Of these above 3000 were crushed by the fall of the vaulted roofs of the churches, and a whole regiment under arms was buried under the ruins of the barracks of San Carlos, which were almost entirely swallowed up. In awful contrast with this scene of desolation was the calm and serene night which followed. The full moon threw its mild radiance over the rugged earth, heaped with ruins, and covered with the dead. Mothers bearing their dead or dying children rushed along the streets. Females wandered about seeking a husband, a brother, or a friend. The wounded, buried under the ruins, implored the help of the passers by, and nearly 2000 were disinterred by the bare hands of the survivors. These, and the sick who had escaped from the hospitals, were laid on the river bank, under the shelter of the trees,

and the dead were consumed on funeral piles erected between the heaps of ruins. The religious and moral effects of so dire a calamity, have been but partially recorded. Funeral hymns were sung by parties walking in procession—while others confessed themselves aloud in the streets; and, as was the case after the great earthquake of Quito in 1797, a number of marriages were contracted by persons who had despised the ordinance. Parents embraced children hitherto unacknowledged. Restitution was promised by persons never suspected of fraud, and families long at variance now met as friends.

Quitting Caraccas, then in its beauty and glory, our travellers commenced their long journey of six or seven hundred leagues, to visit the banks of the great Oroonoko. Crossing the lofty mountains of Los Teques, they found in the deep ravine of the *Quebrada Seca*, a fallen tree of monstrous size, the *Hura Crepitans*, which, though its summit had been burnt, had a trunk 154 feet long, 18 feet in diameter near the root, and 4 feet 2 inches at the smaller end; and in the ravine of Gold, the *Quebrada del Oro*, they met with huge fig-trees, covered with the odoriferous plants of vanilla, and were struck with the huge ribs, which, as high as twenty feet, augment so singularly the thickness of their trunks. Some of these were $22\frac{1}{2}$ feet in diameter near the roots, and as the ribs sometimes separate from the trunk at a height of 8 feet, and become cylindrical roots 2 feet thick, the tree has the appearance of being supported by buttresses. The lateral roots of these trees wind round at the surface of the ground, and when cut at the distance of 20 feet from the trunk, the milky juice gushes out and coagulates,—

“What a wonderful combination of cells and vessels,” says Humboldt, “exists in those vegetable masses, and those gigantic trees of the torrid zone, which, without interruption, perhaps during 1000 years, prepare nutritious fluids, raise them to the height of 80 feet, convey them down again to the ground, and conceal beneath a rough and hard bark, under the inanimate layers of ligneous matter, all the movements of organic life.”

In the dry and pure atmosphere which embosoms the valleys of Tuy and Aragua, Humboldt studied with great interest the remarkable phenomenon of the zodiacal light, a faint luminous pyramid, which rose sometimes 53° and sometimes more than 60° above the horizon. Its light varied at intervals of two or three minutes, without any corresponding change in the atmosphere, sometimes being very faint, and sometimes exceeding in brightness the milky way in Sagittarius.

After visiting Victoria, a town with 7000 inhabitants, fine edifices, and all the resources of commercial industry; and enjoying

the hospitality of the wealthy proprietors in the rich and fertile valleys of Aragua, our travellers examined the interesting lake of Valencia or Tacarigua, in which new islands have been gradually appearing during the slow retreat of its waters. Among the streams which empty themselves into the lake, are several thermal springs which gush out at three points of the granitic cordillera of the coast. Those of Mariara have a temperature of 133° to 138° Fahr. They emit bubbles of sulphuretted hydrogen, and though issuing immediately from granitic mountains, they are so pure, that Humboldt considers their purity as one of the most curious phenomena which the new continent displays. At the town of New Valencia, which they next visited, they were struck with the extensive excavations formed by the ants, resembling subterranean canals, which, when filled with water, often undermine the building. The burning of the larvæ and the fumigation of the cavities, have been employed to extirpate these troublesome insects, but the Franciscans of St. Domingo, when these means proved ineffectual, elected a saint, by lot, to defend them against their ravages! Three leagues beyond Valencia, the hot springs of Trinchera exhibited a temperature of $194\frac{1}{2}^{\circ}$ Fahrenheit, exceeding that of all other springs but those of Urijino in Japan, which reach within 2° of the boiling point. In this vicinity they met with the *cow* or *milk-tree* (the *Galactodendrum*) which yields, from incisions in its trunk, abundance of a glutinous milk, tolerably thick, without acrimony, and of an agreeable and balmy taste. Our travellers drunk considerable quantities of it without any bad effect, and found it only a little disagreeable from its viscosity. This remarkable tree, though dead and dried in appearance, and though springing from the barren sides of a rock, and for several months of the year without a shower to moisten its arid leaves, yet when its trunk is pierced it yields a sweet and nourishing milk, which the natives hasten to receive and carry home to their children. "We seem," says Humboldt, "to see the family of a shepherd who distributes the milk of his flock." In the *cow tree*, whose milk contains the matter of cheese like that of mammiferous animals;—in the *bread tree*, viz., the *Rema* of the South Seas, the *plantain*, the *sago tree*, and the *Mauritias* of the Oroonoko; and in the *butter tree* of Bambarra, discovered by Mungo Park, we cannot but admire the liberal provision for supplying the most urgent of our wants.

In advancing towards the great basin of the Llanos, or savannahs of Caraccas, our naturalists were amused with the Araguatoes, or howling monkeys, which they saw for the first time in numerous bands, moving in procession from one tree to another—a male being followed by many females, several of which carried their young

on their shoulders. When they cannot leap from tree to tree, the male that leads the band suspends himself by the callous and prehensile part of his tail, and dropping the rest of his body, swings, till in one of his oscillations he reaches the nearest branch; and he is then immediately followed by all the rest of the band. Don Ulloa ascribes to these animals a still more extraordinary sagacity; and has even given an engraving, which represents these monkeys forming a sort of chain with their tails, so as to reach the opposite side of a river! The howl of the Araguatoes is heard at the distance of nearly a mile; and, according to the Indians, they have always a leader who chaunts in a strong voice. The missionaries, too, assert, that when a female is in labour, the choir suspends its howling till the birth takes place.

Our travellers had now arrived at the great steppes or savannahs of the Caraccas. There was something awful, but sad and gloomy, in their aspect. All around they seemed to ascend towards the sky; and, in their vast and motionless solitude, they resembled an ocean covered with sea-weed. "I know not," says Humboldt, "whether the first aspect of the Llanos excite less astonishment than that of the chain of the Andes." The area of these Llanos is about 17,000 square leagues, of twenty to a degree. They are inclined towards the east and south, and their running waters are branches of the Oroonoko.

On the arid plains of Calobozo the mirage displays itself in its numerous modifications; but a still more interesting spectacle awaited the naturalists in the mode of fishing for gymnoti or electrical eels by means of wild horses or mules. About thirty of these horses are forced into a pool in the Cona de Bera, surrounded by Indians with harpoons and long reeds, some on the banks, and others upon branches of trees stretching horizontally over the pool. The tread of the horses' feet drives the eels from the mud, and excites them to combat. They crowd under the bellies of the horses. The terrified quadrupeds seek to flee from their enemies, but the wild cries of the Indians, aided by their long reeds, detain them in the battle-pool, while the eels, stunned and excited by the noise and splashing of the horses, defend themselves by their electric batteries, discharging them in powerful and repeated shocks against the heart, the intestines, and the abdominal nerves of the horses. In less than five minutes, two horses were drowned: several sunk under the violence of the invisible strokes, and disappeared under the water, while others, panting with anguish, and with mane erect and haggard eye, raised themselves and tried to escape from the artillery beneath them. Some of the horses elude the vigilance of the fishermen, and upon reeling towards the shore they stretch themselves on the sand, exhausted with the fight, and benumbed by the shocks of their enemies. The

gymnoti too, some of which are 5 feet long, become exhausted in their turn, and, approaching the shore, are caught by means of small harpoons fastened to long cords. Such of our readers as have felt, as we have done, the electric power of the comparatively small gymnoti which have been recently exhibited in the Adelaide Gallery in London, will be able to form some idea of the severity of the shock.

After quitting Calobozo our travellers forded the Uritucu, a river filled with a breed of crocodiles, so remarkable for their ferocity, that they often come out of the water to pursue dogs upon the shore. They were here shown a tent, in which their host of Calobozo, Don Miguel Cousin, had witnessed a most extraordinary scene. While sleeping along with a friend, he was roused by a horrible noise of violent shakings, by which clods of earth were thrown into the middle of the tent. A young crocodile, 2 or 3 feet long, instantly darted from under the bed, flew at a dog near the door, and missing him, ran towards the river. Upon examining the spot, it was found that the crocodile, in a state of lethargy under the dried mud (which it had entered when in a soft state,) had been awakened by the noise, or by the smell of the dog, and burst forth like a mud volcano, escaping amid the shower of clay which it had cast from its tomb.

At San Fernando de Apure, which they reached on the 27th March 1800, they witnessed the destructive effects of the inundation of the Llanos, in which hundreds of wild horses perish. The colts, unable to keep up with the mares in swimming, are drowned in great numbers—pursued by the crocodiles, the prints of whose teeth are often seen on the carcasses of the horses, mules, and cows that are left upon the plains. These crocodiles frequently succeed in drowning the poor Indian women who fetch water from the river; and the only way of being released from their deadly grasp is to thrust the fingers into both their eyes. From this city, accompanied by Don Nicolas Solto, the travellers descended the Apure, examined the singular intertwinings and bifurcations of that river, and the Arauca, and, after a fright from a Jaguar tiger, reached the great Oroonoko. Descending this interesting river, and studying its mighty cataracts, and the wonderful phenomena of nature which its banks everywhere present, they arrived at Angostura, the capital of Spanish Guiana. Having sojourned six weeks in that city, they returned across the Steppes of Venezuela, and reached New Barcelona on the 24th November, where they embarked for the island of Cuba. After a rough voyage of twenty-five days, they reached the Havannah on the 19th December. Here they remained for above ten weeks, examining the natural history and statistics of Cuba, and making preparations for crossing to Mexico, to join young Captain

Baudin's expedition to the Philippine Isles. With this view, they were about to sail for Vera Cruz, when they learned from the public prints that the expedition was not to land at the Philippines. They therefore resolved upon visiting the Andes, and, leaving the Havannah on the 6th March, they landed at Batabano, on the south coast of Cuba, examined the archipelago of the Jardines and Jardinillos, and disembarked, on the 14th March, at Puerto Guaraba, four miles from the populous town of Trinidad of Cuba, to which they rode, mounted two and two on the same horse, and where they were hospitably received by the Governor. In returning to Port Guaraba, from which they set out for Carthagena on the 15th March, they witnessed a singular display of the *Cocuyos* or phosphorescent insects, the *Elater noctilucus*.

"The grass," says Humboldt, "and the foliage of the trees now shone with that reddish light, the intensity of which varies with the will of the animal. It seemed as if the starry firmament reposed on the savannah! In the huts of the poor, fifteen cocuyos, placed in a calabash with holes, enables them to search for objects in the dark. It is sufficient to shake the vessel to excite the animal to increase the splendour of the disks on each side of its body."

The insects are fed with a little sugar-cane, and they are particularly useful on board ship when all other lights are forbidden, from the fear of pirates.

After a voyage of sixteen days, our naturalists again landed, on the 25th March, in South America, near Point Zapote, at the mouth of the Rio Suin, and, re-embarking on the 27th, they reached Carthagena on the 30th. The insalubrity of the town, however, induced them to retire to the beautiful village of Turbaco, where they remained some time, preparing for their journey to the Andes. Here they examined the *volcancitos* or air volcanoes of that place—about 18 cones, 22 feet high and 80 yards round at their base, occupying an area of 908 square feet, devoid of all vegetation. Each cone had at its apex a crater about 20 inches wide, filled with water of the temperature of the air, through which bubbles of almost pure nitrogen gas easily passed. Five explosions of these bubbles, preceded by a rather loud noise, took place in two minutes. Each bubble contained about 13 cubic feet of nitrogen gas. Other similar openings, with mud walls, about a foot high, are situated on the plain, and seem to receive their gas by separate canals, which doubtless all communicate with a subterranean reservoir of compressed air.

Quitting Turbaco about the middle of April, our travellers ascended the beautiful river of Magdalena, and after a voyage of thirty five days they arrived at Santa Fe de Bogota, the capital of New Granada, where they spent several months. Having visited the

grand cataract of Tequendama,—where the river Funza, 144 feet wide, contracts itself to 12 feet, and throws itself by a double fall over a height of 574 feet, raising a column of vapour visible at the distance of seventeen miles,—they left Bogota, in September 1801, passing the natural bridge of Icononzo, adorned by tufts of shrubs above, and four cascades beneath; and crossing the difficult pass of Quindiu, they reached Popayan, at the base of the volcano of Parace, the crater of which, *filled with water*, emits vapours of sulphuretted hydrogen amid frightful noises. Avoiding in their progress the infected atmosphere of the valley of Patia, at the foot of a burning volcano, they reached Quito on the 6th January 1802.

At the house of the Marquis of Salva-Alegre our travellers were received with the most noble hospitality. Don Carlos Montufar,* the Marquis's son, delighted with their conversation, and admiring the intrepidity with which the love of science had inspired them, resolved to associate himself in their grand enterprise of exploring the Cordilleras; and, when they had made the necessary preparations, they set out in the beginning of June 1802, and in a journey of about fifteen days they encountered difficulties almost insuperable, and exposed themselves to the most imminent dangers. They made two ascents to the volcanic summit of Pinchincha, and visited Cotapaxi, the crater of which they could not reach—a volcano, 18,878 feet high, which has produced eruptions even in our own day. In that of 1738, it threw its blaze nearly 3000 feet above the crater. In 1744, its bellowings were heard at Honda, on the Rio Magdalena, a distance of 690 miles. In April 1768, the air was darkened to such a degree by the ashes which it ejected, that the inhabitants of Hambato and Tacunga were obliged to use lanterns in the streets at mid-day. The eruption which took place in January 1808, was preceded by the sudden melting of the snow, and the noises which it sent forth were heard by our travellers at Guyaquil, 180 miles distant. They next visited the volcanic mountain of Tunguragua, the Vesuvius of the New World, and, after incredible efforts in the dangerous ascent of the mighty Chimborazo, they got within the region of perpetual snow, at the height of 2468 toises (14,808 feet) above the sea. When they had mounted 200 toises (1200 feet) higher, they began to bleed at the nose, mouth, and eyes; and when they reached the height of 3016 toises (about 18,000 feet), which they effected on the 23d June 1802, an impassable crevice, wide and deep, obstructed their path, and forced them to return.

* This noble youth fell a victim to his love of freedom in 1811, when the Revolutionary war desolated Columbia.

Having braved so many dangers, and endured so many hardships, they were almost driven to despair by this unexpected obstacle. They observed, however, on their left a huge projecting mass of porphyry, which formed the highest point of the eastern peak, and having scaled it with considerable difficulty, they established their instruments upon its summit, at the height of 19,500 feet above the sea, an elevation 3485 feet greater than that which was attained on the Coruzon by the celebrated Condamine in 1745, 3600 feet higher than Mont Blanc, and one to which no human being had ever before attained. They directed their instruments towards the west or most inaccessible mountains in the great chain, but particularly to the mighty alp which rose immediately above them to the height of 2140 feet. At their present station the density of the air was reduced one half; their lungs received at each inhalation scarcely enough of air to preserve their vitality; and though they had not reached the remotest limit of the earth and the heavens, they yet felt themselves on the very confines of life and death. After having completed their observations, the party returned to Quito,—parted, never to meet again, with their young companion the Marquis of Salva-Alegre,—and afterwards set off for Peru. In their course to the Upper Amazon, of which Humboldt constructed a map, they traversed the almost smoking ruins where once stood the Rio Bamba, and several other villages, which were swallowed up, with 40,000 inhabitants, on the 7th February 1797, by the most desolating earthquake which history has recorded. After passing Loxa, they entered Peru across the Andes, saw the magnificent remains of the Incas' causeway, which crossed the porphyry heights from Cusco to Assouay, from eight to twelve thousand feet above the sea. Sailing down the Amazon to Tompenda, where they collected much information, geographical and botanical, they returned to Peru. In this journey they examined the great mines of Hualgayoc, where large masses of native silver are found, 13,000 feet above the sea; they saw the ancient Peruvian city of Mansiche, with its Pyramids, in one of which had been found an immense collection of gold, and descending to the great Pacific, they found themselves in the long narrow valley which it washes, (*La serenidad perpetua del Peru*) where clouds, rain and thunder are unknown. From Lima, where they staid some months, they embarked for Guayaquil, at which they heard the continued growlings of Cotapaxi, and experienced a severe shock of an earthquake on the 6th January 1803.

The next object of our travellers was to visit Mexico, the country of Montezuma, whose great resources were unknown to Europe and to itself. Embarking at Guayaquil, they landed at Acapulco,—mounted the burning valleys of Mescala and Papa-

gayo, where the river is crossed on the fruit of the *Crescentia Pinnata*, tied together by ropes of agave,—entered the temperate table land of Tasco, with its sylvan scenery, and reached the capital by Cuernavaca.

In this interesting kingdom our naturalists spent more than twelve months. While visiting the mines of Moran, they examined the waterfall of Regla, flanked by vertical basaltic columns, *resting on a bed of clay*, beneath which the basalt reappears. On the 19th September 1803, they descended nearly to the bottom of the volcano of Jorullo, one of the wonders of the new world. Previous to June 1759, the seat of this volcano was occupied by fields of sugar-cane, and indigo, between the brooks of Cuitamba and San Pedro. These fields were bounded by basaltic rocks, one of which, on the west, was the Pic of Tancitaro. In June 1759 alarming subterranean noises were heard by the inhabitants of the Hacienda of San Pedro de Jorullo. Earthquakes succeeded each other for nearly two months, but ceased during the greater part of September. On the 28th, however, the noises having become frightful, the Indians fled to the mountains of Aguasarco. An area of about six square miles, called the Malpays, rose up in the shape of a bladder, and flames issued from every part of it. Fragments of burning rocks were projected to great heights, and, beneath a thick cloud of ashes, the molten surface of the ground swelled up and undulated like an agitated sea. The rivers of Cuitamba and San Pedro rushed into the flaming chasms, and thousands of burning cones, from six to ten feet high, called *hornitos* or *ovens*, and formed of basaltic nodules separating into concentric layers and embedded in black clay, discharged a thick vapour and emitted a subterranean noise. In the midst of these ovens six huge masses, from 1300 to 1650 feet high, rose above the ancient level of the plain, springing from a chasm having a N.N.E. direction. The highest of these masses is the great volcano of Jorullo, which continued to eject basaltic lavas, with fragments of primitive rock, till February 1760. The volcanic ashes thrown out in these eruptions fell thickly on the roofs of the houses of Quentaro, 144 miles distant.* Another

* Regarding this volcano as a phenomenon without example in the history of our planet, Humboldt has ascribed its origin to a deep subterranean chasm, extending east and west 137 leagues, along which the volcanic fire, bursting through the interior crust of the porphyritic rock, has made its appearance at different points of the line of volcanic vents, and inflated the bladder-shaped area covered with the hornitos. Mr. Poulett Scrope, in his *Considerations on Volcanoes*, (App. No. 2, p. 261), has endeavoured to refer the phenomenon to the ordinary principles of volcanic action, and ascribes the convexity of the plain to the union of different currents of lava. Hornitos similar to those of Jorullo were produced in the eruption of Vesuvius in 1822, and were seen in the spring of 1823. They were hillocks five

eruption, accompanied with an earthquake, took place in 1819, when the volcanic ashes fell six inches deep in the streets of Guanaxuato, 140 miles distant. Mr. Bullock, jun., who lately visited this volcano, found that the ovens had almost ceased to smoke, and that the heat of the springs had greatly decreased.*

Having explored the kingdom of Mexico, our travellers embarked in a Spanish frigate for the Havannah, from which, after a sojourn of two months, they set sail for the United States, where they spent six weeks in Philadelphia and Washington, studying the commercial and political relations of that interesting Republic. In August 1804 they returned to Europe, landed at Havre de Grace about the end of the year, and early in 1805 repaired to Paris, to arrange their collections and prepare the materials for a history of their labours.

Soon after his return to France, M. Bonpland was appointed by the Empress Josephine Intendant of the Gardens of Navarre and Malmaison, and he published an account of the rare plants which were there cultivated. In 1818 he went to Buenos Ayres as professor of natural history, and in 1820 he repaired to the interior of Paraguay, not merely as a traveller, but with the view of settling permanently in the country. Having, in partnership with a Scotchman, established at St. Anne, on the eastern bank of the Rio Parano, plantations of *Matté*, the tea of Paraguay, (*Ilex Matha*), he was one morning surprised by the arrival of 100 soldiers, who took him prisoner, along with several of his Indian servants. Some of the Indians saved themselves by swimming, and others were massacred by the soldiers. The plantations of tea were destroyed, and Bonpland, carrying on his back a portion of his valuable collections, was marched to Assumption, the capital of Paraguay, and placed in a fort, as physician to the garrison. The motives of the Director, Dr. Franzia, (who had graduated at Cordova), in this act of violence, have never been ascertained. Humboldt learned in 1824 that Franzia had given Bonpland lands in compensation for his losses, and that he had been erecting distilleries in St. Maria. The most powerful interest was made with Franzia by influential parties in Europe and by the Emperor of Brazil to restore Bonpland to liberty, but no other answer was obtained, than that he was enjoying all the comforts of life, and that he would treat definitively with the Emperor

or six feet high, emitting columns of aqueous and sulphureous vapour. M. Humboldt has not reproduced his theory in the part of *Kosmos* which treats of volcanoes. See the *Edinburgh Journal of Science*, January 1824, vol. iv. p. 50, where the Theory and the Examination of it, by Mr. Scrope, will be found.

* For a general account of Humboldt's researches in Mexico, see his *Political Essay on New Spain*.

when certain difficulties between the two Governments were removed. Jealousy, however, effected what royal interference had failed to accomplish. Bonpland became rich and popular, and the ignoble tyrant, dreading the influence of his character, dismissed him from the country in 1831, and seized all his property excepting what was necessary to carry him to Buenos Ayres.

Baron Humboldt's time was now almost entirely occupied in the preparation and publication of the materials which he had collected in the New World. Soon after his return from Mexico, he published a small but popular work, entitled "Views of Nature," which treats, under a general aspect, of several particulars of the "Life of the Earth," the physiognomy of plants, and grassy plains and deserts. In 1806 and 1807, we find him occupied at Berlin in observing the solstices and equinoxes, and the changes in the direction of the horizontal needle every half hour, during several days and nights; but, though his chief object was to study the nocturnal portion of the daily oscillation, yet such was the delicacy of his instruments, that he detected the most capricious changes in the needle,—which exhibited sudden and rapid movements,—to which he gave the name of *Magnetic Storms*—a discovery which was afterwards prosecuted by himself and others with such distinguished success.

The residence of our author was now chiefly in Paris, where he delivered a course of lectures, of several months' duration, on the physical history of the world. In 1818 he accompanied the King of Prussia to London during the memorable visit of the allied monarchs; and in November of the same year, that liberal Sovereign gave him an annual pension of 12,000 dollars, in order to facilitate the execution of a plan for visiting Thibet and the Himalaya Mountains. This journey had been arranged in Paris; and it was understood that the French Government had agreed to be at the expense of it. Some difficulties, however, seem to have occurred, and the future labours of our author were afterwards transferred to another region of Asia. In 1822, he accompanied the King of Prussia to the Congress of Verona; and, along with his distinguished friend, M. Gay Lussac, he made a scientific tour in Italy, in the course of which he visited Venice, Rome, and Naples. Conjointly with the same philosopher he made a great number of magnetical experiments,—confirmed the theory of Biot on the position of the magnetic equator,—determined that the magnetic force diminishes as we recede from the equator, and that it is not affected either by great chains of mountains, or even by volcanoes in a state of eruption.

Yielding to the anxious solicitations of his friends in Berlin, Humboldt, after living eighteen years in France, took up his resi-

dence in his native metropolis, and was received with the highest distinction by all classes of the community. At the great Congress of German Naturalists and Philosophers, which assembled at Berlin on the 18th September 1828, Humboldt, as might have been expected, took a leading part. He was elected President of the Congress, and opened its proceedings with an address distinguished by its manly eloquence, as well as by its just appreciation of intellectual labour, and of the eminent men who had devoted themselves to the pursuits of science. On the evening of the first day of meeting, he gave a grand *soirée* in the concert rooms attached to the theatre. Upwards of 1200 persons assembled on this occasion; and his Majesty the King of Prussia graced with his presence the fête of his illustrious chamberlain. The Prince Royal (his present Majesty) with the foreign princes, foreign ambassadors, and the Prussian nobility, were present. "It was gratifying," says a distinguished friend, the only English philosopher present, "to observe the princes of the blood mingling with the cultivators of science, and to see the heir-apparent of the throne, during the course of the evening, engaged in conversation with those most celebrated for their talents, of his own or of other countries."

In the spring of 1829, Baron Humboldt was invited by the Emperor of Russia to undertake a mineralogical tour to the North of Asia and the Caspian, and he cheerfully complied with a request which enabled him to gratify his desire to visit the East. He accordingly set out, in company with M. Ehrenberg, the celebrated naturalist, and Gustavus Rose, the equally celebrated chemist, and embarking at Novgorod, on the Volga, they descended to Kasan, and passing through the Khirgeese steppe, visited the ancient city of Bulgaride, or Bolgari, the capital of the Tartar empire, and the residence of the family of Tamerlane. From this they went, by Persia, to Ekatherinenberg, on the Asiatic side of the great Uralian chain, consisting of several parallel ranges, presenting on their eastern declivity, either in veins or in the detritus, the most abundant eruptions of metals and gems—gold, platina, the osmiuret of iridium, together with diamond, zircon, ruby, topaz, beryl, garnet, anatase, and ceylanite. In 1826 Professor Engelhardt predicted that diamonds would be found in the alluvium on the Urals, which strikingly resembled that of Brazil, containing diamonds. Humboldt saw the same similarity between the Ural and Brazilian mountains, but though the sand washed for gold was examined in his presence, no diamonds were found. Count Polier, however, after separating from the Baron, repaired to the possessions of his lady, on the western side of the Urals, and discovered the first Ural diamond. Other diamonds were afterwards found, equal in beauty to those of Brazil. Near Nijnei-Tagilsk our travellers found a mass of

platina, weighing $21\frac{1}{2}$ pounds troy; and in the vicinity of Miask three masses of native gold, two of which weighed 18.36, and the other 28.36 pounds troy. Fossil elephants' teeth were met with, surrounded with alluvium of gold dust. Some of these alluvia, formed probably after the destruction of the great fossil animals, are incredibly rich; and that of Wilkni, belonging to the Demidoff family, has already produced more than 2800 pounds of gold. Proceeding along the southern Ural, they visited the fine quarries of green jasper at Orsk, the celebrated salt mine of Iletzki, the great salt lake of Elton, and finally arrived at Astracan and the Caspian sea.

When the travellers reached the frontier of China, the Chinese commandant, after being informed of their arrival, gave no opposition to their investigations, but merely required as a condition that they should pay him a preliminary visit.

"Seated in his tent, dressed in a suit of silks, and wearing in his cap a long peacock's feather, he received them with a gravity altogether amusing, and sold them, for a bit of red velvet, a historical work, written in the language of his country."

From Astracan the travellers returned, through the country of the Don Cossacks, to Moscow, and arrived at St. Petersburg in November 1829. Here he was received with great distinction by the Emperor; and at an extraordinary sitting of the Imperial Academy of Sciences, he delivered a discourse, containing a general view of the scientific researches recently carried on in the Russian empire.

One of the most interesting results of this journey to Russia, was the establishment of a series of magnetic observatories in different parts of that extensive empire—a measure which Humboldt had long contemplated. He succeeded also in inducing many of the other governments of Europe, and even that of China, to erect similar establishments; and in 1836 he addressed a letter on the subject to the Duke of Sussex, as President of the Royal Society of London, urging the establishment of regular magnetic stations in the British possessions in Canada, Australia, South Africa, and between the tropics. The Royal Society listened to the appeal—the Government gave a grant of money—but delays and difficulties occurred; and it was not till the British Association, at their meeting at Newcastle in 1838, took up the subject, that it was prosecuted with a zeal beyond all praise, and a success beyond all expectation. In order to give effect to this great scientific movement, the British Association, which met at York in 1844, resolved to hold a conference at Cambridge in 1845 of the most distinguished philosophers in Europe, who had taken a part in the magnetical and meteorolo-

gical observations. Invitations were accordingly issued, and were accepted by M. Kupffer from Russia, M. Kreil from Prague, Baron von Senftenberg, Dr. Adolphe Erman from Berlin, Professor Dove from Berlin, and Dr. von Boguslawski from Breslau. The conference having met in June, and deliberated during the sittings of the Association, adopted many excellent resolutions, well fitted to promote the grand object which Baron Humboldt had been the first to pursue.

In the year 1842, Humboldt accompanied the King of Prussia to England in his visit to her Majesty, and was received with much distinction by the leading members of the Royal Society; and in 1843 and 1844 he composed the *System of Physical Cosmography*, which we are now about to analyze.

This interesting work is dedicated to Frederick William IV. King of Prussia. It is prefaced with an introduction, delivered in 1827-8, at the opening of his course of 61 lectures at Berlin, and entitled—*The Various Sources of our Enjoyment in the Contemplation of Nature, and the Scientific Foundation of the Laws that Govern the Universe*. The work itself consists of five parts.

1. The conception and limitation of physical cosmography as a separate science.

2. The objective contents, or a comprehensive survey of nature at large in the scientific form of a general picture.

3. The reflex action of nature upon the imagination and feelings, as stimulating to its study, through animated descriptions of remote countries, landscape poetry, landscape painting, and the cultivation and contrast in groups of exotic plants, &c., &c.

4. The history of creation, or an account of the gradual development and extension of the idea of the Kosmos as a natural whole.

The word ΚΟΣΜΟΣ, *Kosmos*, which our author has employed as the title to his work, originally signified *beauty* and *order*, but was afterwards employed in philosophy to denote the beauty and order which is exhibited in the world (*tota compages rerum omnium*)—the heavens and the earth—the celestial and terrestrial universe.* Regarding the word *Kosmos*, or *Cosmography*, as the name of a separate science, comprehending, according to our author's expressions, "a Picture of Nature," embracing the "Celestial Sphere," the "Terrestrial Sphere," and the "Organic Sphere," or that of organic life, it comprehends only the subjects which are included in the *second* of the preceding divisions. The topics which are to occupy the *third* and *fourth* divisions, how-

* Nam quem κόσμος Græci nomine ornamenti appellavere eum nos a perfecta absolutaque elegantia *Mundum*.—PLIN. 2, 3. Ut hunc hac varietate distinctum bene Græci κόσμος, nos lucentem *mundum* nominaremus.—CICERO, *Philos. Fragmenta*, Timæus *De Universitate*, cap. x.

ever interesting and important in themselves, stand without the pale of Cosmography as a science, and will, therefore, not occupy our attention in the present article.

In endeavouring to convey to the uninstructed mind a correct view of the material universe, we must not for a moment forget that it is from the evidence of testimony alone that the reader can derive the knowledge which he receives. If his teacher proves ignorant, or faithless, or fanciful, omitting great facts, distorting cardinal truths, or drawing upon his imagination, either for the figures or the colouring of his landscape, the faith of the disciple will waver and give way, and even his real acquirements will be ranked among the errors which he has detected, or the phantasms which he has exorcised. Nor is the result less fatal when truth is disfigured or overlaid by metaphysical abstractions, and, like the organic relics of royal life, preserved only when swathed in hideous bandages, and secreted in the vaults of a pyramid. Far be it from us to limit the mind in its analysis and development of physical truth, or to check the fancy from its excursions into the bosom of the heavens, or into the bowels of the earth. We demand only from the expounders of celestial and terrestrial physics, that they separate what reason has established from what they themselves conjecture; and distinguish the probable and possible from what has been really observed and rigorously demonstrated. There is no department of the exact sciences where this passion for the marvellous has been, and still is, more fatally indulged than in that which treats of the starry firmament; and, with the diffusive character of error, it has been imported from our sidereal colonies, where distance weakens the restraints of law and truth, into the mother country of the solar system, where planets, and comets, and satellites, are yet under the rigorous surveillance of geometry and analysis. We regret to be under the necessity of acknowledging, that in several popular works which treat of Astronomy, this science has been drawn, by some insidious current, into the region of romance; and we fear that several portions of the admirable work before us have a tendency to encourage the same licentiousness of speculation. We shall attempt, however, in the present article to strip this noblest of themes of its meretricious show, and to bring it back to its native simplicity and grandeur. Truth is never so imposing as when she appeals but to reason,—never so lovely as when unadorned,—never so assured of victory as when she marches without mercenaries and without baggage.

In an age when the globe has been frequently circumnavigated, we make no great demand on the faith of our readers, when we take it for granted that the earth is a sphere 8000 miles in diameter, and revolves round the sun at a distance of 96 millions

of miles. When we look at the heavens above and around us, and observe the stars at different times of the day, from different parts of the earth, or from different points in its annual course, we discover that a very small number of them change their place in the heavens, that a still smaller number change also their brightness and their magnitude, and that the great body of them exhibit no such changes. Hence we are soon led to the great truth that those which do undergo these changes, form, along with our earth and sun, a system by themselves, which has been called the planetary or the *Solar System*.

This grand portion of the universe, in which our lot is cast, and the scene, doubtless, of our future being, consists of a SUN immovable in the centre of the system, and 883,000 miles in diameter, above 100 times greater in diameter than our earth, controlling by its attractive force *seven* great planets which revolve around him in orbits nearly circular,—Mercury, 3224 miles in diameter, in $\frac{1}{4}$ th of a year; Venus, 7687 miles in diameter, in a little less than $\frac{3}{4}$ ds of a year; the Earth, 7912 miles in diameter, in 1 year; Mars, 4190 miles in diameter, in 1 year and $\frac{3}{4}$ ds; Jupiter, 89,170 miles in diameter, in about 12 years; Saturn, 79,042 miles in diameter, in about 30 years; and Uranus, 35,112 miles in diameter, in about 80 years. If we take the density of water as 1, then that of the Sun is $1\frac{1}{2}$, Mercury $9\frac{1}{2}$, Venus $5\frac{1}{2}$, the Earth $5\frac{1}{2}$, Mars $3\frac{1}{2}$, Jupiter $1\frac{1}{4}$, Saturn $\frac{1}{2}$, and Uranus nearly 1. The orbits in which these planets revolve round the Sun, are slightly inclined—not more than 7° in the case of Mercury—to the plane of the Earth's orbit. They all revolve round their own axis, which is differently inclined to the plane of their orbits. In the wide space which intervenes between Mars and Jupiter, no fewer than four small planets were discovered early in the present century, moving in orbits almost crossing one another, and inclined very considerably to the plane of the Ecliptic, or that of the Earth's orbit. The size of these smaller planets, or asteroids, as they have been called, has not been accurately measured, but, as Humboldt has observed, they are scarcely "one-half more in their superficies than France, or Madagascar, or Borneo."

But while these primary planets revolve round the Sun, several of them have satellites revolving round themselves. The Earth *one*, namely, our Moon, Jupiter *four*, Saturn *seven*, and Uranus *six*. In addition to his satellites, Saturn is surrounded with a double ring of solid matter, one of the grandest objects which has been revealed by the telescope.

The Sun with his 11 planets, and their 18 satellites, form, properly speaking, the Solar System; but this system has been visited by great numbers of comets, all of which again quit it,

with the exception of three, whose elliptical orbits do not extend beyond that of Uranus. These numerous comets, of various shapes and magnitudes, and of various forms of orbit, cross our system in paths inclined at every possible angle to the Ecliptic, and after long intervals, again repeat their visits.

"The Solar System," says Humboldt, "in other words, the very variously-fashioned matter which circulates about the Sun, consists of eleven principal planets, eighteen moons or satellites, and myriads of comets, three of which, called planetary comets, never quit the limited spheres of the proper planets. We may further, with no slight show of propriety, reckon as falling within the empire of our Sun, and included within the sphere of his central force:—1st, A ring of vaporous matter, revolving in all probability betwixt the orbits of Venus and Mars, certainly extending beyond the orbit of the Earth, which is visible to us in a pyramidal form, and is known by the name of the *Zodiacal Light*; 2d, A host of very small asteroids, whose orbits either intersect the orbit of the Earth, or approach it very nearly, and give occasion to the phenomena of *aerolites* and falling stones."

Although the *zodiacal light*—which we have previously described, (p. 211)—is here and afterwards introduced, as a *part of the Solar System*, and as, in "great probability," produced by an extremely white ring of nebulous or vaporous matter, revolving in space; yet, as in all favourite speculations, probability soon passes into certainty, and we are subsequently informed, "that the vaporiform particles of which the ring consists," and which *circulate about the Sun in conformity with planetary laws*, "may either be self-luminous or lighted by the Sun." The same language of certainty is repeatedly used by our author, and in concluding his discussion of the Solar System he says,—

"Thus far we have considered what belongs to our Sun, and the world of formations that is ruled by him,—the primary and secondary planets,—comets of shorter and longer periods,—meteoric asteroids, which move single in closed rings, or in multitudes like a stream, finally a luminous nebulous ring, which circles round the Sun near to the orbit of the Earth."

In harmony with this spirit of speculation, the ring of vapour is supposed by some to be fed "by emanations from the tails of myriads of comets which approach near to the Sun," while others unite it to the Sun as part of his atmosphere, and declare it to be very probable that it is "closely connected with the dense world of ether in the vicinity of that luminary." So vague, indeed, are the conceptions of this *ignis fatuus*, that it is made to contract and expand like caoutchouc, having a "singular variability of extent," and "seeming at times not to extend beyond the orbit of the Earth." While thus animadverting on the speculations of

others, it would ill become us to indulge in any of our own; but when our author thus connects his ring of vapour so closely with the Earth's orbit—when he tells us of the wonderful lightness of many whole nights of the year 1831, in which small print could be read at midnight in Italy and Germany—and of a terrestrial light which, in 1743, was so phosphorescent at midnight, that objects 600 feet distant could be plainly distinguished by its light—and when he acknowledges that these facts are in obvious contradiction to all the latest and ablest observations on the theory of twilight, and the height of our atmosphere—may we not connect the Zodiacal Light with the same class of phenomena, and *conceive* even that the Earth may leave traces of its path in cleaving its annual way through the ethereal void?

The *second* addition which our author has made to the Solar System is, we think, equally problematical with the *first*. That the fire-balls, and shooting-stars, and aerolites, are little planets or asteroids under the dominion of the Sun, is a speculation which astronomers are not prepared to adopt. Never seen beyond our atmosphere—never containing ingredients but those which occur in the crust of the Earth—never found in revolution, but always in descent, and generally accompanied with phenomena decidedly atmospherical—it is premature to pronounce dogmatically on their origin; and still more so to assign them a place among the planets and asteroids that form the empire of the Sun. When the observations of another century have been accumulated, we may then hope to ascertain whether these interesting bodies are revolving planetary asteroids, as our author supposes; or masses projected from the Earth, as the great Lagrange supposed; or volcanic scorix from the Moon, as Laplace believed; or aggregations of vaporous matter diffused through our atmosphere; or small fragments of the body now shivered into four asteroids, which once revolved as a single planet between Mars and Jupiter.

From the Solar System, the abode of man—explored by his telescopes and surveyed by his genius—we now pass to those remote regions, where other forms of creation, and it may be, other laws of matter, attest the power and wisdom of their Maker. With the diameter of the Earth's orbit—a base of 190 millions of miles—astronomers have succeeded in proving, that if lines are drawn from the extremities of this base to the nearest fixed star yet discovered—viz. *α Centauri*—the two lines will form an angle of $0^{\circ}.9128$, or nearly *one second*. This angle is called the parallax of the star, or the parallax of the Earth's annual orbit. Hence it is easy to calculate—and the result is certain—that the distance of the star from the Earth is about 21,000,000,000,000 miles, or about 12,000 times the distance of Uranus from the Sun; and from another calculation, equally simple and certain,

it follows, that in the space round our Solar System devoid of stars, there is room in one dimension, or one straight line, for 12,000 solar systems—in *two* dimensions, or in one plane, there is room for 130 millions of solar systems—and in actual sidereal space of three dimensions, there is room for 1,500,000,000,000, or one and a half million million of solar systems the size of our own. Thus separated by such an inconceivable void from all other visible celestial bodies, the mind is somewhat startled at the statement made by so many astronomers, and adopted by Baron Humboldt, that our Solar System, thus *isolated* in space, is *part of a larger astral system*, whose dimensions they have ventured to guess, and whose shape even they have been bold enough to delineate.

"If we compare the universe," says Humboldt, "with one of the isle-studded oceans of our planet, we think that we can perceive matter distributed groupwise: now collected into unresolvable nebulous specks of various age—now condensed around one or several nuclei—and again rounded into clusters of stars or isolated sporades. The cluster of stars—the islet in the infinity of space to which we belong—forms a lenticular, compressed, and everywhere distinct, or separate layer, the longer axis of which has been estimated at from seven to eight hundred, and the shorter axis at about one hundred and fifty distances of Sirius," (supposed equal in distance to α Centauri.)

Other authors speak of the *form of the existing universe*, and of ascertaining with definiteness *the shape and dimensions of our firmament*, with as much confidence as if they had circumnavigated creation, and sounded its depths and surveyed its bounds. It would be in vain to grapple with phantoms which scarcely appeal to our senses, or to call in question the form and size of a spectre, when its dupe acknowledges that he was placed in its centre when he saw it. It may be a sufficient defence of our scepticism, to express it in the words with which Humboldt himself prefaces the paragraph which we have quoted.

"We are almost disposed to compare the chapter in our physical cosmography which discusses the nebulous specks of heaven, with the mythological portion of general history. They both begin alike;—the one in the twilight of remote antiquity—the other in the depths of illimitable space; and where reality threatens to disappear, fancy is doubly excited to draw from her own abundance, and to give form and endurance to the indefinite and the changeable."

The lenticular cluster of stars referred to by Humboldt, and the *Firmament* which is called *ours* by Professor Nichol, is nothing more than the *Milky Way** or galaxy, a bright region of stars which

* The only stars in which a parallax has been clearly established are α Centauri by Maclear, $0''.9128$, δ Cygni by Bessel, $0''.3483$, and α Lyrae, about $0''.25$ by Struve.

seems to form a ring in the heavens. It is assumed, therefore, without any proof or reasonable ground even of conjecture, that the stars which form this ring compose a cluster, near one side of which our Solar System is placed. Now, it is obvious that if the stars of the firmament, including unresolved nebulous masses, are disseminated unequally, they will exhibit groups of stars, or regions of superior brightness. If these regions are united so as to form linear masses, or so as to surround our system, we can have no evidence whatever that such masses form a real group of stars at nearly the same distance, like the trees which form a plantation, or the ships which form a fleet; and still less that stars arranged in a ring round our system, belong to one cluster, including our system. The absurdity of such a conclusion will appear from a description of what is called a *Milky Way of Nebulae*, which stretches across the heavens almost at right angles to the *Milky Way of Stars*.

"The Milky Way of Nebulae," says Humboldt, "does not properly belong to our astral system; it surrounds this without having any physical connexion with it, at a vast distance, and passes nearly in the form of a great circle through the thick nebulosity of Virgo (particularly in the northern wing,) through the Coma Berenices, the Great Bear, the Girdle of Andromeda, and the Northern Fish."

As we know nothing of distances in the heavens except in the very few cases where a parallax has been observed,* we cannot pronounce upon the distances of the nebulae in question. They may be nearer to us or farther from us than the stars in the Milky Way, and though they are now distinct nebulae, Lord Rosse's telescopes may resolve them, or may unite them by stars or by nebulous matter, so as to induce the speculators of another century to make them a single cluster or firmament, within which our system may find a place.

We cannot better expose the unphilosophical character of all such speculations, than by referring to the celebrated nebula, 51 of Messier's Catalogue, which Sir John Herschel, from its appearance in his best telescope, considered as resembling the nebula of the Milky Way, and which he thence denominates a "brother system." Another writer, Professor Nichol, adopts the idea, repeats Sir John Herschel's drawing of the nebula, and ventures to give a section of it, resembling pretty closely a fox's head without the eyes.

"I have now to state to you," says he, "a remarkable circumstance, perhaps the strangest and most unexpected which modern astronomy has revealed. Although the telescope has not yet enabled us to lay

* See this *Journal*, vol. ii., p. 185, where the views of the theory of the Milky Way are somewhat different from those stated in the present article.

out the plan of our cluster, (51, Messier) from *interior* surveys, it exhibits what seems its *very picture* hung up in external space. Look at Plate III. It represents an object resting near the outermost range of telescopic observation not resolved, but doubtless a great scheme of stars, which is the *fac-simile* of that to which we belong."

In the same spirit Humboldt informs us that—

"The form of our astral stratum, and the parted ring of our Milky Way, present themselves *reflected with wonderful similarity* in a nebula discovered by Messier in 1774, and but imperfectly seen by him."

If the reader will turn to the 478th page of our last Number, he will see that Lord Rosse's telescope represents this celebrated nebula in an entirely different aspect, and has proved that it has no resemblance whatever to the conjectured form of the Milky Way. Every improvement of the telescope, indeed, will put an end to speculations founded on observations made with less perfect instruments. Distinct nebulae will be conjoined,—dark spaces in the heavens, like those in the Scorpion and in Ophiuchus will be filled with light—separate stars will be united with clusters or nebulae now invisible, round nebulae will be supplied with curls and branches, uniformly luminous discs will appear in spots and streaks, and apparent condensations of nebulosity will shine in broken and irregular patches.* The observations already made by Lord Rosse warn us against farther speculations in astronomy, and especially against that *sidereal clairvoyance* which pretends to see what is invisible to the telescope. The phrenologist will form a better guess of the shape of the human brain through the scalp and the skin, than the aeronaut who seeks to define the form and limits of the cloud in which he happens to be involved.

Our readers will already have conjectured that Baron Humboldt will be a supporter of the nebulous theory, and of the formation of our Solar System by rings of matter projected from a central Sun.

"If we turn our attention," says he, "to those nebulae (*World-Mists* separating into determinate forms,) we discover that they are in the course of suffering change in their state of aggregation. * * * These nebulae are *believed to be* in process of various and progressive changes, according as the *star-dust or vapour* composing them is becoming condensed, in harmony with the laws of attraction, around one or several nuclei. * * * The process of condensation which Anaximenes and the Ionic school once taught, seems here to proceed, as it were, under our eyes. This object of inquiry and conjecture is peculiarly attractive to the imagination."

* In a very short paper, just published by Lord Rosse in the *Phil. Trans.* 1845, Part ii., p. 321, with two plates, the reader will find ocular proof of the correctness of these views.

It might be a sufficient answer to speculations like these, simply to state, that a single particle of the *star-dust* or vapour above referred to, may actually be a sun a million of miles in diameter—that no condensation of the nebulous matter has yet been proved to exist—and that the changes in the form of nebulae are as yet matters of faith and not of vision;—but as these views of creation have unfortunately taken hold of the popular mind, we are anxious to submit to our readers some facts and conclusions of a very different nature which we trust will put an end to this class of astronomical speculations.

There are many stars in the heavens called variable stars, which change their brightness periodically, sometimes disappearing altogether or nearly so, and then reappearing with renewed lustre. The periods of many of them have been ascertained. Several stars once seen have disappeared altogether, and stars are now seen which were not seen before. Now, whatever explanation may be given of these variations, one thing is certain, that there are portions of celestial matter *not self-luminous*. In our own Solar system we know this to be the case, and we know also that the non-luminous bodies are the most numerous. Hence, we are entitled from analogy to conclude, that the non-luminous bodies in other systems have the same ratio to the luminous ones which exists in our own. These views have received a remarkable confirmation from the discovery of Professor Bessel, described in a preceding article,* that there are non-luminous central bodies round which bright stars like Sirius and Procyon revolve. This invisible, or non-luminous matter, and these invisible or non-luminous central bodies, may still have a faint luminosity, which, with telescopes of vast power, may yet be revealed to us; but whether this be the case or not, our astronomical speculations have no meaning if they do not take cognizance of those portions of the material universe which are not visible in our best telescopes. We should form a poor estimate of the number and

* See this *Journal*, vol. ii., pp. 197-8. The following are Professor Bessel's own words:—"Stars (such as Sirius and Procyon) whose motions, since 1755, have shown remarkable changes, must (if the change cannot be found to be independent of gravitation) be parts of smaller systems. If we were to regard Sirius and Procyon as double stars, the change in their motions would not surprise us; we should acknowledge them as necessary, and have only to investigate their amount by observation. But light (luminousness) is no real property of mass. The existence of numberless visible stars can prove nothing against the existence of numberless invisible ones. There have been also stars which seemed to possess the peculiarity of a bright body passing over, and which have again lost it; for example, the star of Tycho. The phenomena, then, of the varying motions of stars which are so important for the results of plane astronomy, seem also to possess interest in relation to our knowledge of the physical constitution of the universe."—*Letter from Professor Bessel to Sir J. Herschel*, Lond. and Ed. Phil. Mag. March 1845. Vol. xxvii., p. 261.

position of hostile bands, were we to judge of them by the glimmer of their lights, without considering the number of dark lanterns which they employ. If there is a *Milky Way* of stars spanning the heavens, and a *Milky Way* of nebulae stretching at right angles to its plane, so may there be an *Inky Way* of non-luminous stars, or of non-luminous nebulae, either separate from the former, or so combined with them as to render it impossible, under any circumstances, or with telescopes of any power, to form a conjecture respecting the form or number or position of the celestial creations which form the material universe.

If we dismiss, then, from astronomy its poetical fancies and its groundless conjectures, we shall find but a small number of well-ascertained truths in our survey of the starry sphere.

1. The first grand truth is, the discovery of parallax in the nearest bright stars, such as α Centauri, α Lyræ, and 61 Cygni.

2. The second grand truth is, the existence of binary systems, in which one of the stars revolves round the other, in periods of different duration, varying from forty-three years, as in γ Coronæ, to several thousands, as in 66 Ceti and other stars.

3. The third is the existence of groups of stars so very remote, that the most powerful telescopes have not been able to resolve them.

4. The fourth is the existence of stars of variable lustre, the disappearance of some stars, and the reappearance of others.

5. The existence of stars of different colours, these colours arising from the want of certain specific rays in the spectrum which they form.

6. The proper motion of the fixed stars, different from that arising from the earth's annual motion, and apparently owing to the advance of our Solar system to a point in space whose right ascension is $257^{\circ} 49'$ and declination $28^{\circ} 50'$ north.

From the celestial we now descend to the terrestrial sphere—from the consideration of matter seen, to that of matter handled, and weighed, and decomposed—from regions where life is invisible, to man's own birth-place and home, the abode of organic and inorganic life, where his intellectual powers will find their fittest and most useful exercise. In this field of mental toil our knowledge assumes a more positive character, and in following our author through domains familiar to himself, we shall have more frequent occasion to display the docility of the disciple than the vigilance of the critic.

The terraqueous globe, which we inhabit, has not only been circumnavigated, but has been measured by the finest instruments, and the most correct methods of observation. Eleven measurements of large portions of its surface have been made, and

its curvature along different meridians ascertained. Its curvature has also been deduced from experiments with the pendulum, and from particular inequalities in the moon's orbit. By these methods, the polar diameter of the earth has been found to be 652278.66 toises, and its equatorial diameter 6544154.28 toises, viz., 21875.62 yards longer than the polar one,—a quantity equal to $4\frac{1}{4}$ th times the height of Mont Blanc, or $2\frac{1}{4}$ times the height of Dhwalagiri in the Himalayas, the most elevated mountain in the world. Hence our earth has the form of an oblate spheroid, resembling an orange,—a form deducible also from the action of the protuberant ring of matter at its equator upon the moon's orbit.* This spheroidal form of the earth is the necessary consequence of its rotation about its polar axis, and indicates that it was once in a soft or semifluid state.

After having *measured* the earth, the next step of the astronomer is to *weigh* it,—that is, to ascertain its mean density, or how many times heavier it would be than a globe of water of the same size. This has been done in three ways:—1st, By measuring the deflexion of a plumb-line from the perpendicular in the vicinity of Shehallion, a mountain in Scotland; 2d, by comparing the length of a pendulum beating seconds on a plane with its length when beating seconds on a mountain, as done by Carlini on Mont Cenis; and 3d, from observing the action of masses of lead or cast iron upon the torsion balance of Mitchell, as made by Cavendish, Reich, and Baily. The first of these methods gave 4.713; the second, as corrected by Giulio, 4.950; and the last, 5.448, which is Cavendish's result, as corrected by Baily, or 5.438, which is Reich's result, or 5.660, which is the mean of Baily's result, varying between 5.507 and 5.847. "The probable error of the whole 0.0032," says Sir John Herschel,† "shows that the mean specific gravity of this our planet is, in all human probability, quite as well determined as that of the ordinary hand specimens in a mineralogist's cabinet,—a marvellous result, which should teach us to despair of nothing which lies within the compass of number, weight, or measure."

But though the earth has been thus measured and weighed, it is but a small portion of it that can be subjected to our inspection and scrutiny. The crust of the earth, as it has been called, is that which intervenes between the highest mountain summit and the bottom of the sea, or of the deepest mine, which is not above 2000 feet below the level of the ocean. When seams of coal form basin-shaped strata, dip downwards, and re-appear at

* The measurement of degrees of the meridian gives $\frac{1}{4}$ as the degree of oblateness; the lunar theory the same, and the experiments with the pendulum $\frac{1}{4}$.

† Life of Baily, *Lond. and Edin. Phil. Mag.* Jan. 1845, p. 61.

measurable distances, it is easy to ascertain the depth of the basin, or the lowest point of the coal seam. M. van Dechen has found that the coal measures of Liege, which contain organic remains, lie at the depth of 3250 feet below the sea level, while the lowest coal strata on the Saarbruck dip 19,406, and 20,656 feet below the sea—as far below that level as Chimborazo rises above it. Hence, as Humboldt remarks, from the summit of Dhwagiri, the highest point of the Himalayas, to the bottom of this basin, containing the vegetable remains of the primeval world, we have a perpendicular depth of 45,000 feet, or $\frac{1}{17}$ of the earth's semi-diameter. The scoræ and mineral masses ejected by active volcanoes, come from depths which Humboldt considers to be sixty times greater than those which the labours of man have reached. The depths of the sea, which Sir James Ross sounded with 25,000 feet of line without reaching the bottom, are as thoroughly unknown to man as the very central regions of the globe.

The condition of the interior of the earth, either with respect to structure or temperature, is yet undetermined. As the rocks which form the dry land, have only a mean density of 2.7; and, as the mean density of the dry land and the ocean together cannot exceed 1.6, it is obvious that, in order to make up the earth's mean density of 5.66, the strata of the interior must increase enormously, either from the effect of pressure, or the existence of metallic or heavy materials. From experiments in deep mines, and in Artesian wells, it is obvious that the temperature of the earth increases downwards; and this increase has been estimated at 1° of Fahrenheit for every 94 English feet. That this heat goes on increasing to a high degree, according to Baron Fourier's views, is rendered probable by the ejection of melted minerals and rocks from volcanoes and fissures, as well as from the phenomena of Artesian wells. According to the researches of this eminent philosopher, the temperature of the earth varies from three causes;—1st, from the position of the sun and the season of the year, in consequence of which the temperature changes periodically, according as the heat penetrates from above downwards, or as it passes from below upwards; 2d, from the slow propagation of heat from the tropical regions towards the poles, where it escapes into the atmosphere and into distant space, the temperature of which is probably below the freezing point of mercury; and, 3dly, from the secular cooling of the earth from every point of its surface. As the length of our day has not altered since the age of Hipparchus so much as the one-hundredth part of a second, and as the time of the earth's rotation must depend upon its volume, Fourier has drawn the important conclusion that the mean tem-

perature of the body of the earth has not changed so much as the $\frac{1}{3125}$ th part of a degree of Fahrenheit during the last 2000 years.

Were the Sun the only source of heat, and our atmosphere and the terraqueous covering of our globe uniform conductors, the equator would be the parallel of greatest atmospheric heat, the poles the points of greatest cold, and the equator and all the circles or parallels of latitude would be *isothermal* lines, or lines of equal mean temperature. This, however, is far from being the case. The different materials, solid and fluid, which form the superficial covering of the earth, absorb and radiate heat unequally, and the currents in the atmosphere and in the ocean, and various other causes, with some of which we are imperfectly acquainted, modify in a remarkable manner the uniform distribution of the solar heat. It is, therefore, only by thermometrical observations that we can determine the forms of the isothermal lines or curves, and the actual distribution of heat in the different climates and regions of our globe. The first person who treated this curious subject was Baron Humboldt, in a memoir first published in 1817, and translated in 1819 by Sir David Brewster. This system of isothermal lines, however, extended only to that of 32° Fahrenheit. The curves of equal mean temperature approached the equator in the meridians passing through Canada and Siberia, and receded from it in the meridian of the west of Europe, but these facts gave no idea of the singular distribution of temperature in the arctic regions, and the only inference drawn from them was—that the climate of America was more severe than that of Europe,—an inference, too, disputed by Sir John Leslie. In this state of opinion, Sir David Brewster conceived the idea that there were two poles of maximum cold in each hemisphere, apparently related to the two magnetic poles; and in order to put it to the test of observation, he obtained from Mr. Scoresby his observations in the Greenland seas, and from Sir Charles Giesecké copious and valuable observations made in West Greenland, at Upernavick, Omenak, Godhavn, Julianæshaab, and Eyafoird. By combining these observations with those of Sir Edward Parry and others, he concluded that the Canadian pole of maximum cold was in W. long. 100, and N. lat. 80° , with a temperature of $-3\frac{1}{2}^{\circ}$ Fahrenheit; while the Siberian pole was in E. long. 95° , and N. lat. 80° , with a temperature of $+1^{\circ}$ of Fahrenheit. The mean temperature of the equator, which Humboldt had made $81\frac{1}{2}^{\circ}$, the author just quoted made $82^{\circ} 15''$ Fahrenheit, a result adopted by Professor Berghaus of Berlin, in his interesting Physical Atlas, now publishing in Edinburgh.* The equator

* The first four sheets of this highly interesting and valuable Atlas, greatly improved by Professor Berghaus himself, has been published by him in conjunction

of temperature, or the line of maximum heat, crosses the real equator in long. 102° near Sincapore, passes through Socotra and Kouka in Africa, both to the north of the parallel of 12° , dips to within 2° of the equator in W. long. 18° , rises again till it passes north of the South American continent in 12° N. lat., and sinking rapidly to within 3° of the equator, it crosses it in 150° of W. long., and again descending 7° south of the equator, it gradually rises to it at Sincapore.

While the temperature of the atmosphere thus varies in different latitudes, that of the crust of the earth suffers an analogous change. The sun's rays penetrate to a certain depth, and just beyond that depth the temperature is unchangeable throughout the year, but varies with the latitude. The mean temperature of the earth, which differs little from the mean temperature of the atmosphere, is determined by the temperature of deeply seated springs, or by thermometers sunk in the earth. Some springs are so deeply lodged—such as the Crawley and Black springs near Edinburgh—that they scarcely vary a degree of Fahrenheit throughout the whole year.

"The mean temperature of ordinary springs," says Humboldt, "is lower than that of the atmosphere of the place where they appear, when the water is derived from high levels: Their temperature increases with the depth of the strata with which they come in contact at their origin. The mixture of the waters which come from the mountain elevations, and from the depths of the earth, renders the position of the *Isogeothermal lines*, or lines of equal internal heat of the earth, difficult of determination, when the conclusion has to be come to from the temperature of the springs as they rise: The temperature

with Mr. A. K. Johnston, in Mr. Johnston's *National Atlas of Historical, Commercial and Political Geography*.—Edinburgh, 1843. These four sheets contain a complete map of the Isothermal Lines of our globe, according to the latest observations,—a map of the Geographical Distribution of the Currents of Air,—another of the Culture of Plants used by man for his food,—another of the Currents of Air,—and a fourth of the Mountain Chains of Europe and Asia. The high approbation which the most distinguished scientific men in England have expressed of these four sheets, has induced Mr. A. K. Johnston to extend his plan, and to publish a new work entitled, "The PHYSICAL ATLAS, a series of Maps, illustrating the geographical distribution of Natural Phenomena. By HENRY BERGHAVS, LL.D., Regius Professor of Geology, Berlin, and Principal of the Geographical Institute, Potsdam; and A. K. JOHNSTON, F.R.G.S., and Geographer to her Majesty." This work will embrace the phenomena of meteorology and magnetism, hydrology, geology, phyto-logy and zoology, in thirty maps imperial folio. From the first sheet now before us, containing—1st, A Physical Chart of the Atlantic Ocean. 2. The Mountain System of Europe; and, 3d, The Distribution and Statistics of Plants, after the observations of Humboldt, Schouw, and others, we have no hesitation in recommending this work as one of great elegance and utility, doing equal honour to the talents of its authors, and to the enterprize of the publishers; and calculated to make knowledge popular and attractive, by teaching through the eye, by graphical representation, what can neither be communicated by reading nor conveyed by tabulated numbers.

of springs depends, like the height of the line of perpetual snow, on numerous and highly complex causes. It is a function of the temperature of the stratum in which they have their origin—of the capacity for heat of the ground—and of the quantity and temperature of the atmosphere or meteoric water that falls; which last again, according to the mode of its origin, differs in its temperature from that of the lower strata of the atmosphere. Cold springs can only give the mean temperature of the air, if unmixed with water that is rising from great depths, or that is descending from considerable heights, and when they have flowed for a very long way under the surface of the earth,—in our latitude from 40 to 60 feet, and in the equinoctial zone one foot. These depths are those, in fact, of the stratum of earth in which, in the torrid and temperate zone respectively, the point of invariable temperature begins, in which the hourly diurnal, or monthly variations in the temperature of the air are no longer perceived."

From the temperature of the earth we pass along with our author to its magnetical condition. So early as a thousand years before the Christian era, the Chinese used magnetic cars, upon which the movable arms of a human figure pointed constantly to the south, as a method of guiding themselves through the grassy plains of Tartary; and in the third century—seven hundred years before the compass directed the vessels of Europe—Chinese ships navigated the Indian ocean under the guidance of a needle pointing to the south. Terrestrial magnetism shews itself in three classes of phenomena. A magnetic needle floating in water, or freely suspended by a fibre, or placed upon a pivot, points either to the north or to some other quarter of the heavens. The distance between its direction and that of the meridian, in any place, is called the *declination* or *variation of the needle*, and lines passing through the different parts of the earth where this declination is equal, are called *lines of equal declination* or *isogonial* lines. If the needle is nicely balanced before it is magnetized, it will, when freely suspended, dip, or take a position inclined to the horizon. This dip varies in different places, and the *lines of equal dip* are called *isoclinical* lines. If a needle is made to oscillate horizontally, the number of oscillations which it performs before it is brought to rest, indicates the magnetic force, and the lines of equal magnetic power are called *isodynamical* lines. These lines are generally represented graphically, on charts, and without this method of displaying them it is impossible to convey to the reader any idea of their form and windings. The line in which there is no dip is called *the magnetic equator*, and the points where the needle rests in any position are called the *magnetic poles*. "The remarkable connexion," says Humboldt, "between the curvature of magnetic lines and that of

my isothermal lines, was first pointed out by Sir David Brewster," the magnetic poles coinciding with the poles of maximum cold. The various phenomena of terrestrial magnetism undergo hourly changes, apparently depending upon the motions of the sun. Sometimes, however, these changes are sudden, and what is called a *magnetic storm* is produced, causing the needle to oscillate on each side of its mean position. This disturbance of the needle is connected with the *aurora borealis* or *northern lights*. It "indicates an interruption of equilibrium in the distribution of the terrestrial magnetism, and when it is very intense the equilibrium of the distribution is restored by a discharge accompanied with an evolution of light." The phenomena, therefore, of coloured northern lights is the conclusion of a magnetic storm, just as lightening is the conclusion of an electrical storm. While the electrical storm is limited to a small space, the magnetic storm is considered, by M. Arago, as affecting the needle over large portions of continents, and far from the place where the aurora is visible. The northern lights have been seen as far south as Mexico and Peru, and on the 14th January 1831 even so far south as 45° of south latitude. Southern lights have been frequently seen in England by Dr. Dalton. The following interesting account of the *Aurora*, in which all the particulars of the phenomena are embraced in one picture, is given by Humboldt:—

"Low in the horizon, and nearly at the place where it is cut by the magnetic meridian, the clear sky becomes black; and a sort of dusky screen is produced, which rises gradually to the height of 8° or 10° . The colour of this portion of the sky becomes brown or violet. Stars are seen through the haze, as through a dense smoke. A broad and highly luminous arch, first white and then yellow, bounds the dusky segment, but as this arch arises later than the haze, the latter cannot, as Argelander has stated, be the effect of contrast. The highest part of this bright arch is usually from 5° to 18° from the magnetic meridian, towards the side on which the magnetic declination lies.

"The luminous bow, in constant motion, flickering and changing its form continually, sometimes remains visible for hours before rays or pencils of rays shoot from it to the zenith. The more intense the discharges of northern lights, the more vividly do the colours play from *violet* and *bluish-white* through every shade and degree of intensity to *green* and *purplish-red*. The magnetic fiery columns shoot up at one time singly from the luminous circle, even mingled with black rays like thick smoke; at another, many columns rise simultaneously from several and opposite points of the horizon, and unite in a flickering sea of flame, to the splendour of which no description can do justice, and whose luminous waves assume another and a different shape at

every instant.* Around the pole of the dipping needle the radiations finally collect themselves, and form the corona or crown of the northern lights,—surrounding the apex of the canopy of heaven with the mild radiance of its streaming, but not flickering rays. It is only in rare cases that the corona is completely formed; but when it does appear the phenomenon is at an end—the radiations become rarer, shorter, and less brightly coloured—the crown of the luminous arches breaks up, and only broad, motionless, and almost ash-grey, gleaming, fleecy masses are irregularly scattered over the celestial vault;—these vanish in their turn, and, before the last trace of the dusky segment has disappeared,—of this brilliant spectacle nothing is left but a white delicate cloud, feathered at the edges or broken up as a cirro-cumulus into small rounded and equi-distant masses.”

The altitude of the northern lights has not been accurately determined. The results vary from three or four thousand feet to 389 miles; but some of the latest observers are disposed, without any good reason, to connect the phenomenon with the region of the clouds.† As magnetic currents are produced by changes of temperature, our earth—scorched at its equator, and frozen at its poles of maximum cold—has been regarded as a great thermometric apparatus, and all the phenomena of terrestrial magnetism, luminous as well as mechanical, as the consequences of this condition.

“What gives,” says Humboldt, “this phenomenon (the Northern lights,) its greatest importance, is the fact which it reveals that the EARTH IS LUMINOUS, * * * exceeding by a little, in the case of the brightest coloured rays, that shoot up to the zenith, the light of the moon in her first quarter. * * * In the hotter zones of the earth, between the tropics, there are many thousand square miles of ocean which are similarly light-engendering. Light foaming, flashes the bursting wave,—the wide level glows with lustrous sparks, and every spark is the vital motion of an invisible animal world—so manifold is the source of terrestrial light. And shall we conceive it latent, not yet set free in vapours as a means of explaining Moser’s pictures—a discovery in which reality still presents itself to us as a vision shrouded in mystery?”

Another effect of the internal heat of the earth is seen in certain geological phenomena, exhibiting “the reaction of the interior on the exterior of the globe.” The most striking of these

* Lowenorn perceived the oscillations of the Aurora in bright sunshine, on the 29th January 1786.

† See a very interesting Lecture on the Aurora by Professor Potter, in the *Athenæum*, October 18th, 1845, No. 938, p. 1016. Professor Potter considers the Aurora as produced by gaseous matter existing beyond the earth’s atmosphere at altitudes exceeding forty or fifty miles.

phenomena are earthquakes, which are distinguished by a series of perpendicular actions from below upwards, by horizontal motions, and by rotatory vibrations following each other in succession. At Rio Bamba in, 1797, the bodies of many of the inhabitants were thrown by the perpendicular movement upon the hill of La Culla, several hundred feet high. The horizontal movement generally takes place in waves in a rectilinear direction, and with a velocity of from twenty to thirty English miles in a minute, but sometimes in circles, or great ellipses, which occasionally intersect one another. The rotatory concussions are the most dangerous. They twist walls without overturning them, and deflect rectilineal plantations of trees, and ridges of land covered with grain. Fields of cultivated ground have been often transposed, one taking the place of the other; but this is connected with a motion of translation, or a mutual penetration of several strata. Humboldt saw at Rio Bamba, a place where all the furniture of one house was found under the ruins of another; and strange disputes took place in Quito, about property, in cases where things were carried many hundred yards from their original stances. Atmospheric phenomena are not produced during earthquakes, as is generally believed. Humboldt only once observed the dip of the needle changed, but neither the intensity nor the declination were affected. In the Piedmontese earthquakes, however, extreme changes took place in the electrical state of the atmosphere. The stupendous earthquake at Rio Bamba was not accompanied with any sound; but noises like rattling, rolling, clanking of chains, and ringing, generally follow. Subterraneous bellowing, and rolling thunderings, alternating with sharp claps, have been heard in a limited space for days and weeks without any earthquakes, as at Guanaxuato, from which the inhabitants fled in terror, leaving behind them great piles of silver bars. The bolder inhabitants, however, returned, and "disputed possession with the bands of robbers who had seized on the treasure."

The undulations of great earthquakes often extend to the distance of thousands of miles. That of Lisbon, on November 8th, 1755, was felt in Sweden, Thuringia, Canada, and the West India Islands. It shook a region four times the superficial extent of Europe. The hot-springs at Tepliz ran dry, and returned with a red colour. The sea at the Lesser Antilles became inky black, and rose 20 feet above its usual level. At Cadiz it rose 60 feet. In 1793, sixty thousand persons perished in Sicily, and about thirty five thousand at Rio Bamba in 1797.

Volcanoes in a state of activity are safety-valves for the regions which surround them. Earthquakes, therefore, exhibit to us the force which produces volcanoes, "but such a force as uni-

versally diffused as the internal heat of the globe, and proclaiming itself everywhere, rarely gets the length of actually eruptive phenomena, and when it does so it is only in isolated and particular places." The force sometimes expends itself in *raising whole districts above their former level*, as in the case of the earthquake of Cutch in June 1809, which raised Ulla Bund, east of the Delta of the Indus, and of that which raised the coast of Chili in November 1822. One of the most remarkable of these upheavings is that of the islands of Cheduba and Reguain on the west coast of Arracan, surveyed in 1841 by H. M. Brig Childers, and situated in the prolongation of the great volcanic band of the Sunda Islands. Reguain consists of three perfect levels differing six or eight feet in height, the inner one having in its centre a volcano 90 feet above the sea. The inner level is the original island, about 7 miles long, and $1\frac{1}{2}$ broad; the one next it equally long, about 4 miles broad, was subsequently raised; and the outer level about 17 miles long, and 6 broad, was raised about 80 years ago. A quantity of petroleum issues from a small volcanic mount at a corner of the original island.* The influence of earthquakes upon man and animals is thus beautifully described by our author.

"Before we quit this great phenomenon, we must advert to the cause of that indescribable, deep, and peculiar impression which the first earthquake which we experience makes upon us, even when unaccompanied with subterranean noises. The impression is not, I believe, the consequence of any recollection of destructive catastrophes presented to our imagination by historical narratives. That which seizes upon us so wonderfully is the disabuse of our innate faith in the firmness of the solid and sure-set foundations of the earth. From infancy we are accustomed to the contrast between the movable element of water, and the immovability of the soil on which we stand,—a belief confirmed by the evidence of our senses. But when the ground suddenly rocks beneath us, the feeling of an unknown mysterious power in nature coming into action, and shaking the solid globe, arises in the mind. The illusion of our early life is instantaneously annihilated! We are undeceived as to the repose of nature—we feel ourselves transported to the realm, and subjected to the empire, of destructive unknown powers. Every sound—the slightest rustle in the air—sets attention on the rack, and we no longer trust the earth on which we stand. The unusualness of the phenomenon throws the same anxious unrest and alarm over the lower animals. Swine and dogs are particularly affected by it; and the very crocodiles of the Orinoco, otherwise as dumb as our lizards, leave the trembling bed of the stream, and rush bellowing into the woods. To man the earthquake is something unlimited and all-pervading.

*. See BERGHAUS and JOHNSTON's Chart, No. 45 of National Atlas.

We can remove from the active crater of a volcano; we can escape from a flood of lava that is pouring down upon our dwelling; but with the earthquake we feel that whithersoever we fly we are still over the hearth of destruction."

Our author next introduces us to what he calls elementary MATERIAL PRODUCTION—to chemical changes in the crust of the earth, and in the composition of the atmosphere. We see issuing from the ground, as the produce of extinct or active volcanoes, aqueous vapours, carburetted hydrogen, gaseous carbonic acid gas, sulphuretted hydrogen gas, and sulphurous and hydrochloric acid vapours. Carburetted hydrogen thus emitted, was anciently used in a *portable* state in bamboo tubes in the city of Khiung-tschen in China; and in the village of Fredonia it has been employed in heating and lighting houses. Air springs of carbonic acid gas rise in the valleys of the Eifel and in Western Bohemia, and Monticelli found hydrochloric acid in enormous quantities during the eruption of Vesuvius in 1813. On the 19th May, 1806, in $2^{\circ} 32'$ S. lat., and $20^{\circ} 46'$ of W. long., Admiral Krusenstern observed, in the Atlantic ocean, what he justly calls a rare phenomenon,—“A pillar of smoke sprung up as high as the mast of a ship, which suddenly vanished, but again showed itself, and then entirely disappeared.”*

Hot-springs have their origin in mineral strata of very different kinds. They derive their heat from the internal heat of the earth; but the hottest of all of them, viz., the Trincer, a spring, as already referred to,† whose temperature is about 205° of Fahrenheit, flows remote from all volcanoes. Humboldt is of opinion that hot-springs arise from the percolation of atmospherical water into the interior of the earth, and its contact there with a volcanic focus; and in proof of this he mentions the two streams which disappeared at the eruption of Jorullo,‡ and under the severe shocks of an earthquake reappeared as hot-springs.

When a permanent connexion is established between the interior of the earth and the atmosphere, a volcano is produced. The reaction of the interior upon the crust of the earth is often interrupted, and is again renewed. The eruptions of the great volcanoes in the Andes occur at intervals of nearly a century. Eruptions from the craters of some volcanoes are extremely rare. They generally occur at lateral fissures, and in these fissures cones of eruption are occasionally raised.

* BERGHAUS and JOHNSTON's *Physical Atlas*, Part I., p. 6. Dr. Horner was of opinion that this was either the effect of volcanic action, or the precursor of an island.

† See page 212.

‡ See page 218.

When volcanoes rise above the line of perpetual congelation, very interesting phenomena are produced. Floods arise from the sudden melting of the snow, and heaps of smoking ashes are floated by the torrents on blocks of ice. Caverns become reservoirs of water, communicating with alpine streams, abounding with fish, and when the earthquake, which precedes the eruption, comes, the caverns pour out a deluge of water, fishes, and tuffaceous mud. At the eruption of Carguairazo, 18,000 feet high, in 1698, nearly two square miles were desolated with liquid tuff and argillaceous mud, enclosing dead fishes; and the putrid fever of Iborno, north of Quito, which occurred seven years before, was ascribed to an eruption of fishes from the volcano of Imbabaru.

We have already described the interesting volcano of Jorullo, and as the general phenomena of volcanoes are well known, we shall not dwell any longer on the subject.*

But it is not merely in earthquakes and volcanoes that we discover the reaction of the interior of our planet upon its external crust. The fierce and indomitable agents which are imprisoned in its womb have, in primeval times, burst from their chains, and thrown out upon the earth's surface in a liquefied and softened state, that large class of plutonic rocks which have received the name of *Eruptive* or *Endogenous*; while in other localities they have forced up continents and islands, and thus altered the form and the character of the solid and fluid portions of the globe. In studying the formation and transformation of mineral masses, geologists have discovered four different processes by which they have been produced.

1. **ERUPTIVE** or **ENDOGENOUS** rocks, ejected in a melted state from the earth.

2. **SEDIMENTARY** rocks, or those deposited on the earth's crust, from fluids in which their particles are chemically dissolved, or mechanically suspended.

3. **METAMORPHIC** rocks, or those altered in their structure and stratification either by contact with erupted rocks, or by the penetration of substances in the state of vapour.

4. **CONGLOMERATE** rocks, such as coarse or fine-grained sandstone breccias, composed of mechanically-divided masses of the three first species.

The first and most interesting of these rocks were ejected during the chaotic state of the primitive world, and under very different conditions from those which now exist. Numerous and vast fissures must then have rent the pavement of the globe.

* See BRECHT and JOHNSTON's *Physical Atlas* for graphical representations of volcanoes.

Vents and natural tunnels must have formed communications between the atmosphere and the burning nucleus, and gaseous currents charged with chemical ingredients must have been working their way among the smaller vents and crevices, while the giant force beneath was upheaving chains of mountains, or protruding islands, or discharging streams of granitic lava and basalt, or forcing them into the cracks and openings which accompany the tremendous agencies that were fashioning the earth. Sublimed by its central fires, or melted in its capacious crucible, the useful ores and the precious metals and gems ejected with the ascending lava, were thus made accessible to man,—at first to add to his wealth and administer to his vanity, but at last to effect that mighty scheme of civilization in which human genius is to fulfil its highest functions.

Under the head of eruptive rocks, Humboldt includes *granite*, and *syenite*, *quartzose porphyry*, *greenstone* or *diorite*, *hypersthene rock*, *euphotide* and *serpentine*, *melaphyre*, *augitic*, *uralitic* and *oligoe-glassic porphyry*, *basalt*, *phonolite*, *trachyte* and *dolerite*. The granite sometimes protrudes in vaulted masses like an island. It sometimes covers the clay-slate schists in Siberia for a mile, and penetrates them from above in slender veins; and in the same manner it covers the Jurassic limestone in the mountains of Oisen, and syenite, and chalk and syenite interposed, near Weinböhla in Saxony. The eruptive rocks in the Ural mountains contain many beautiful crystals, particularly of beryl and topaz.

The *sedimentary rocks* include the greater portion of those that were called secondary and tertiary. The oldest have been deposited at high temperatures and under great pressure. This class of strata embraces *schists* or *slates*, *carboniferous deposits*, viz., the coal formation, *limestones*, *travertine*, viz., fresh-water limestone *fer*, and the siliceous sinter of hot-springs, and the *infusorial* strata, such as *polieschie*, so successfully studied by M. Ehrenberg. The sedimentary strata are penetrated by veins of the eruptive rocks, which modify the hardness, the silicification and the crystallization of all adjacent ones, even though they are not in contact with them. *Garnets* are formed in clay-slate, under the influence of basalt and dolerte, and *Vesuvian*, *augite* and *ceylanite* are found at the contact surfaces of eruptive and sedimentary rocks. The *diamonds* of Grammaoa lie in layers of solid silicic acid, and are sometimes enveloped in plates of mica, like the garnets in mica-slate. Humboldt has found beds of pure quartz in the Andes, between 7 and 8000 feet in thickness.

The *conglomerate* or *fragmentary* rocks exhibit two modes of formation. While the materials of some are accumulated by the sea, or streams of fresh-water, others consist of fragments detached by attrition from basaltic or trachytic rocks. These attri-

tion-conglomerates occur in large masses in both divisions of the globe.

From the subject of rocks and minerals, our author proceeds to the interesting topic of Fossil Geology, which he treats very briefly under the heads of Palæozoology, Palæophytology, Palæopetrology, and Palæogeography, or the ancient form and extent of our continents; but as we have had occasion, in two former articles,* to treat these branches of knowledge at considerable length, we shall confine ourselves at present to a few interesting facts mentioned by our author.

In treating of the coal formation, Humboldt observes,—

“In order to form an idea of the luxuriance of vegetation in the former world, and of the masses of vegetable matter accumulated by running water, and which have very certainly been converted into coal in the humid way, I remind the reader that in the Saarbruck coalfield there are 120 seams of coal lying one over another, exclusive of a host of smaller seams, less than a foot in thickness; that there are single seams of coal of 30, and even of more than 50 feet thick, as at Johnston in Scotland and Creuzot in Burgundy; whilst in the forest regions of our temperate zone, the carbon which the trees of a certain superficial extent of ground contain, would not cover this surface with a layer of much more than half an inch in thickness in the course of 100 years. Near the mouth of the Mississippi, and in the *wood-hillocks*, as they have been called, of the Siberian Icy sea, described by Admiral Wrangel, however, there is at the present time such an accumulation of trunks of trees, such a quantity of drift-wood washed down by land streams, and brought together by ocean currents, that the phenomena remind us at once of the events which took place in the inland waters and insulated bays of the primeval world, and gave occasion to the production of the coal formations which we now discover hundreds of feet below the surface of the ground. It is also well to remember that these coal measures are indebted for no inconsiderable portion of their materials, not to the trunks of mighty trees, but to small grasses, and to frondiferous and low cryptogamic vegetables.”

In speaking of the new alluvium, upon which lie the huge erratic blocks which have been mentioned in preceding articles, Humboldt expresses his conviction that they have been dispersed by the eruption and tumultuous descent of great masses of pent-up water suddenly let loose by the upheaval of mountain chains. As the oldest members of the transition-formation are the schists and graywacke, which enclose some remains of sea-weed, from the Silurian formerly the Cambrian Sea, our author asks the question:—“Upon what did those oldest rocks, as they are called, repose, if gneiss and mica-slate are to be regarded but as

* Vol. I., p. 1, and Vol. III., p. 470.

metamorphosed sedimentary strata?" To this question he replies :—

"What we call the older Silurian strata, are only the upper portions of the solid crust of the earth. The eruptive rocks which we see breaking through, pushing aside and heaving up these, arise from depths that are inaccessible to us; they exist, consequently, under the Silurian strata, composed of the same association of minerals which are familiar to us under the name of granite, augite, and quartz porphyry, at the points where, by breaking through, they become visible. Resting on analogies, we may safely assume that that which at one and the same time fills extensive fissures in the manner of veins, and bursts through the sedimentary strata, can only be an offset from an inferior bed. The active volcanoes of the present day carry on their processes at the greatest depths; and from the strange fragments which I have found included in streams of lava in different quarters of the globe, I hold it as more than probable, that a primogenial granitic rock is the foundation of the great systems of stratification which are filled with such variety of organic remains."

Our author next proceeds to Physical Geography—a subject of great interest, though but little studied in this country. The proportion of land to water in our terraqueous globe is nearly about 100 to 270; or almost three-fourths of the earth are covered with water. The islands form about one twenty-third of the continents, and the continents occupy three times more surface in the northern than in the southern hemisphere. Though differing in configuration, or rather in the position of their greater axes, the Old and New Worlds are still similar in the extent and outline of their opposite coasts. In the Old World, the larger axes of the continents are from S.W. to N.E., and in the New World from N. to S. Both worlds are cut off towards the N., in the parallel of 70°, and to the S. they both run into pyramidal points, having a submarine extension in the shape of islands and shoals. According to our author, the Atlantic ocean has the features of a great valley, as if floods had directed their shocks successively to the N.E., then to the N.W., and then to the N.E. again.

The upheaving of continents, and the probable depression of the sea, are subjects but of recent study. While the coasts of North Sweden and Finland are rising at the rate of about four feet in a century, South Sweden is sinking. In the course of 1800 years this rise has been about 320 feet. We have no direct evidence of an actual progressive decrease or increase of the sea. In the beginning of the present century, indeed, several harbours in the Mediterranean were left completely dry for many hours; but this and similar phenomena only shew that there may be local retreats of the sea, and even permanent exposures of its shores,

without any general depression of the ocean level. According to Elie de Beaumont, the mountain chains of the globe have been upheaved at different periods, the time of upheaval being necessarily between the time when the erupted strata were deposited, and that when the horizontal *beds* which extend to the foot of the mountains were laid down. These great changes in the earth's crust at first appear to us as evidences of extensive revolutions; but this opinion is greatly modified when we compare the quantity of the upheaved masses with the area of the continents in which they lie.

"The mass of the Pyrenees," says our author, "if distributed evenly over the area of France, would only raise the surface of that country about 108 feet. The mass of the Eastern and Western Alps, spread in the same way over the area of Europe, would raise the land no more than 20 feet. By a laborious calculation I have found that the centre of gravity of the mass of the countries which in Europe and North America rise above the level of the sea, lies at a height of 630 and 702 feet, and in Asia and South America at an elevation of 1062 and 1080 feet."

In these numbers we have a rough approximation to the relative intensities of the upheaving forces in different regions of the earth. These forces have their periods of activity and repose, and the present upheaving of the Swedish coast, and the appearance of new erupted islands, shew us that even our present repose is only apparent. New chains of Alps may yet in future ages separate nations and subdivide empires, and geologists have even ventured to point out the directions in which the internal force is likely to experience the smallest resistance.

The ocean itself has lately been the subject of interesting research. The surface has generally the same temperature as the air which rests upon it, but from the equator to the parallels of 68 north and south it is somewhat warmer. The temperature decreases downwards, and in the voyages of Kobzev and Dupetit Thouars, water was obtained from great depths as cold as 2°8 and 2°5 cent., (37° and 36½° Fahr.) This icy temperature, which prevails even in the depths of the tropical seas, shews the existence of inferior polar currents proceeding from the poles to the equator. The surfaces of all the seas that communicate with each other are generally on the same level. Winds and currents, however, in the case of land-locked seas, occasion local elevations. At the Isthmus of Suez, the Red Sea is at different hours of the day from 24 to 36 feet higher than the Mediterranean. In the open sea the tides rise only a few feet, but, owing to conflicting tides, they sometimes rise at St. Maloes 50 feet, and in Nova Scotia to 65 or 70. The great equatorial current from east to west, supposed to arise from "the advancing times of the tides and of the trade winds," moves

with a velocity above ten English miles every twenty-four hours. The narrow currents, or *ocean rivers*, "run warm water in higher and cold water in lower latitudes." The gulf-stream is an example of the first. Commencing probably to the south of the Cape, it passes through the Carribean Sea and the Gulf of Mexico, and turns first northward and then eastward, throwing off branches to the north and south, producing the fogs of Newfoundland, and reaching even the British shores. The average velocity from the Nore to lat. 31 N. is about 56 geographical miles in 24 hours. The greatest velocity near the Bahamas is 120 miles. Its temperature is sometimes very high. Although the currents are supposed by Lieutenant Maury to be the great highways by which migratory fishes travel, yet the whale is averse to the warm water of the gulf-stream, though the sea nettles, the *Medusæ*, which are the chief food of the whale, occur in great quantities, covering the sea for leagues, in the gulf-stream, which conveys them to the Azores, the great resort of whales; and thus "the Gulf of Mexico," says Lieutenant Maury, "is the harvest-field, and the gulf-stream the gleaner, which collects the fruitage planted there, and conveys it thousands of miles to the hungry whale at sea."*

Among the most remarkable oceanic phenomena are the Great Fucus banks of Corvo and Flores, called the *Sargaco Sea*, in the middle of the Atlantic. It occupies the eddy caused by the revolution of currents, and stretches north and south between the parallels of 18° and 48°, and the meridians of 30° and 42°. The *Fucus natans*, or sargazo, a species of sea lentils or duck-weed, from which this sea, sometimes called the "grassy sea," takes its name, has a beautiful green colour. It floats on the surface, and is often so thickly matted as to retard greatly the progress of vessels. The quantity of it is surprising. Humboldt says that the surface which it covers "is more than 260,000 square miles, almost six times as large as Germany,"† and he considers it as vegetating while floating above the numerous sand banks which he conceives produces it.

In contrast with the gulf-stream is the great and cold current of the Pacific ocean, which brings the colder water of high southern latitudes to the coasts of Chili and Peru. In the middle of the tropics its temperature does not exceed 60° Fahrenheit, while the still water beyond it varies from 81½° to 84½°‡.

Although our author has not included either glaciers or icebergs

* *American Journal of Science*, vol. xlvii., p. 179.

† Humboldt's *MSS.*, quoted in Berghaus and Johnston's *Physical Atlas*, No. I., p. 5, where all the ocean currents and this Fucus bank are graphically represented.

‡ See this *Journal*, vol. i., p. 527.

in his summary of physical geography, they form a very interesting portion of that branch of science. Detached from the immense glaciers in the arctic valleys which open into the sea, icefields 100 miles long, 50 feet broad, and from 4 to 6 feet high, are thus put to sea; and ice-islands have been met with from 180 to 200 feet high, and therefore, (as ice shows only one-eighth of its bulk above the water), not less than 1600 feet beneath the surface. The Great Western encountered an ice-island about 100 miles long. The largest iceberg was three-fourths of a mile long, and the highest 100 feet above the water, or 900 feet in altitude. About 300 were seen by this steamer. Captain Weddel found himself within two ship's length of an ice-island 180 feet high. The lofty part overhung the rest, and was cracked from the top down to the water-line.

"Within half an hour," he says, "we had the appalling sight of the overhanging mass immediately over our quarter-deck, with the fearful sensation that if our masts came in contact with it, the projecting part would fall upon us, and sink both vessels. Our escape was caused solely by our having a large piece of flat ice between us and the ice-island, which prevented us from touching it."

These ice-masses are found as far south as 40° of north latitude, and are believed to have occasioned the loss of the President steamer.*

From the ocean we ascend to the atmosphere, which exhibits, according to our author, six classes of natural phenomena, viz., chemical composition; changes of transparency, polarization and colour; in the density or pressure; in the temperature, humidity, and electricity of the air. While its oxygen is the pabulum of life, it is itself the carrier of sound, the instrument of speech and of social intercourse. Dry air contains in 100 parts 79.2 of azote and 20.8 of oxygen, with from 2 to 5 ten thousandths of carbonic acid, a still smaller quantity of carburetted hydrogen, and traces of ammoniacal vapours. Poisonous exhalations rise from the ground, and give a peculiar smell to fogs. Substances in a state of minute subdivision rise into the atmosphere; and the dust which creates a mist about the Cape de Verd Islands, has been found by Ehrenberg to contain an infinity of infusory animalcules with siliceous shells.

The weight of the air changes hourly, reaching its maximum at $9\frac{1}{4}$ A.M. and $10\frac{1}{2}$ P.M., and descending to its minimum at $4\frac{1}{4}$ P.M. and 4 A.M. The daily change varies from 1.32 line at the equator to 0.18 of a line in latitude 70° north. According to Professor Dove, the difference in the temperature of the equato-

* See the Section on Icebergs and Doubtful Islands in Berghaus and Johnston's Physical Atlas, No. 1., p. 6.

rial and polar regions produces two opposite currents in the upper regions of the atmosphere and on the surface of the earth; and in consequence of the difference in the rotatory velocity of these regions, the current from the pole acquires an eastern, and that from the equator, a western direction. In the struggle between these antagonist streams, we find the cause of the variations of atmospheric pressure and temperature, of the precipitation of moisture, and of the formation and shape of clouds. The laws of the wind remain yet to be investigated. Their strength during the day increases with the temperature, and, according to Mahlman, in the middle latitudes of the temperate zone, the W.S.W. is the prevailing wind.

The distribution of heat, as exhibited in the mean annual temperature, varies from the equator to the poles, according to Sir David Brewster's formula, in the meridian of the west of Europe as the cosine of the latitude, and not as its square, as Tobias Mayer maintained, the north and south poles being reckoned the coldest points. This, however is not the case, for according to the first of these authors, there are two poles of maximum cold, one in Canada and the other in Siberia. The mean annual temperature of any place in reference to the first of these poles is found by multiplying $86^{\circ}.3$ by the distance of the place from the pole and subtracting $3\frac{1}{4}^{\circ}$; while for the other pole it is obtained by multiplying $82^{\circ}.8$ by the distance of the place from it. Hence the isothermal lines near the cold poles encircle them like rings, to which an approximation will be seen in the chart of Berghaus, already referred to. The mean annual temperature occurs at two times of the day, distant 11h. 15' from each other, about $9\frac{1}{4}$ A.M., and $8^{\circ} 30'$ P.M. The five branches of the daily curve are nearly parabolas, but of different magnitudes. Humboldt gives the name of *isocheimal* to the lines of mean winter heat, and *isothermal* to those of mean summer heat. The line of perpetual congelation, or the snow line, reaches different heights in different latitudes and on different mountains. It depends not only upon the temperature and moisture, but upon the height and configuration of the mountains themselves. In South America the snow line reaches as high as Mont Blanc. In the high lands of Mexico it descends below that height 960 feet, and in the Western or Chilian Andes it rises more than 250 feet higher than under the equator. On the volcanic mountains of Penguenes, in 33° S. lat., Dr. Gillies found it at 2270 and 2350 toises above the sea. The volcano of Aconcagua, in lat. $32\frac{1}{2}^{\circ}$ S., N.E. of Valparaiso, though 1400 feet higher than Chimborazo, was once seen without snow. In the Himalayas, the snow limit of the southern slopes is about 12,000 feet, and on the northern ones about 15,000.

The quantity of vapour in the atmosphere varies, like the

temperature, with the latitude, the height above the sea, the season of the year, and the hour of the day. When precipitated in the form of dew, fog, rain, or snow, it forms the vivifying principle of the earth, supplying the vegetable world with their food as well as with their drink. In the parched regions of Cumana, Coro, and Ceara, where, for six or seven months, no visible dew or rain ever falls, the stems and the leaves of plants must draw moisture from the air by some vital process. In other countries the fall of rain is enormous. In Havannah 102 Paris inches have fallen in the year, four times as much as at Paris or Edinburgh. On the slopes of the Andes, the rain diminishes with the height.

The electricity of the atmosphere has been studied chiefly in its brilliant manifestations in the thunder-storm: Its source and its diurnal changes are yet to be explored. Its influence on the nervous system of man, and over the circulation of the sap of plants, give it high importance as a sublunary agent. While some ascribe its development to the evaporation of fluids containing earths and salts—to the growth of vegetables—and to the unequal distribution of heat, M. Peltier has ascribed it “to the influence of a constantly negative charge of our globe.” According to the same author, slate-gray coloured clouds have resinous, and white, rose, and orange coloured clouds vitreous electricity. Thunder-clouds sometimes involve the highest summits of the Andes, and have been measured at a height of 251,000 feet; but generally they descend to within 5000, or even 3000 feet of the ground. The discharges of lightning from these clouds are, according to Arago, of three kinds—zig-zag or forked, and sharply defined at the edges; lightning illuminating whole clouds; and lightning in the form of fire-balls;—the two first continue only the thousandth of a second, the last for several seconds. On the coast of Peru thunder and lightning are unknown; while under all the other tropical zones, at certain seasons of the year, and four or five hours after noon, thunder-storms occur almost every day.

To the various agencies which we have been considering, Humboldt has given the expressive name of the “*LIFE OF THE EARTH*”—a condition not void of analogy with that of other forms of being, in which the living principle is more normally displayed. Mark our planet’s power of locomotion, in its diurnal movement, and in its annual course—the dignity of its march, the fidelity with which it keeps its appointments, and the even tenor of its way, as it wheels its ethereal round. Behold the variety of its dress—the verdant drapery of spring, the flowery robe of summer, the russet mantle of autumn, and the eider

down of its snowy coverlet. See the flash of its eye, in the aurora's fire columns, in the volcanic flame, or in the lightning's blaze. Hear its gentle voice in the murmurs of its granite rocks—the tinkling of its driven sand—the murmurs of its waters; or its louder strain in the roar of its foaming breakers, and the awful diapason of its subterraneous thunder. Listen to its breathing in the gaseous elements which exhale from its pores—or in the suffocating vapours which rush from its burning lungs. Nor is this *Earth Life* but a name to please the imagination, and scare the judgment. The globe which it animates has a real dynamical existence—instinct with vital power—sustained from perennial resources, and wielding inexhaustible energies. No created arm is needed to repair its mechanism, nor human skill to direct its operations. The mighty steam power, which works the wonders of our age, is but man's tool—useless unless he guides it—dead unless he feeds it. But the locomotive giant which carries us on its shoulders is framed by an abler artist, and poised by a mightier arm. It affords to man's mortal being a pilgrim home,—at first a cradle—at last a grave. It is the nursery too of his race—the gymnasium for the development of his intellectual powers—the Elysium of his enjoyments. But while thus the self-supplied storehouse for his physical wants, it is tributary also to his spiritual necessities. It is the grand penitentiary of the moral world—in which are tried the spirits, and searched the hearts of its inmates; and, according to the efficacy of its discipline, it may prove either the gloomy prison car which conducts to judgment, or the triumphal chariot which transports to victory.

From the consideration of the phenomena which constitute the life of the earth, Humboldt proceeds to the subject of organic life—the geographical distribution of plants and animals, and the classification of the different varieties of the human race. In so inviting a path we would cheerfully follow him; but our exhausted space, and, we fear, the exhausted attention of the reader, counsel us to draw to a close.

In wafting ourselves in imagination to our own satellite, the Moon—the nearest of our celestial bodies—we have passed over a distance equal to *thirty* times the diameter of our globe. In advancing to the Sun we travel over a distance equal to 400 times that of the Moon; and before we reach Uranus, the remotest of the planets, we have traversed a space equal to twenty times the Earth's distance from the Sun. Thus placed at the limits of a system, enclosed in a circle 1800 millions of miles in radius, our appreciation of distance would appear to be exhausted; and we seem to be on the margin of an unfathomable abyss.

The telescope, however, and the mural circle, have enabled us to span the void ; and the genius of man, proud of the achievement—and justly, if humbly, proud—has crossed the gulf 12,000 times the radius of his own system, that he may study the nearest world in the firmament of heaven. Beyond this frontier lies the whole universe of stars—their binary systems—their clusters, and their nebulous combinations. The observed parallax of *one fourth of a second*, in *a Lyræ*, carries us *four* times as far into the bosom of space ; but though beyond this we have no positive measures of distance, it would be as unphilosophical to assign limits to creation, as to give it an infinite range.

In this rapid flight into space we have traversed it but in one dimension, and the line which we have traced is but a unit in the scale of celestial distance. Creation, in its wide panorama, is still beyond us, above us, and around us. The overarching heavens still enclose us, and distant worlds yet sparkle in their canopy. If from this bourne, from which the astronomical traveller alone returns, we look back upon our course, our own planetary system ceases to be perceived. Its sun is dim—itsself but an invisible point in the nebulous light which intervenes. Where, then, is our terrestrial ball—its oceans—its continents—its hills—it empires—its dynasties—its thrones ? Where is our father-land—its factions—its Christian disunions—its slave crimes, and its unholy wars ? Where is our home—its peace—its endearments—its hopes and its fears ? Where is man, the intellectual monad—the only atom of organic life that can pierce the depths and interpret the enigma of the universe ?—and yet the only spark of a spiritual nature which disclaims the authority and resists the will of the universal King ! They have all disappeared in the far off perspective—the long vista of space, whose apex, were it a sun, the hugest telescope would fail to descry. No living thing here meets the eye, and no sentiment associated with life presses on the affections. The tiny organisms of earth and ocean—every thing that moves and breathes, that grows and dies—all are engulfed in the great conception of the universe. The straining mind cannot unite the incommensurable extremes. The infinite in space—the eternal in duration—the omnipotent in power—the perfect in wisdom, alone fill the expanded soul, and portray, in their awful combination, the CREATOR OF THE UNIVERSE.

In retracing his downward path, the astronomer traverses the same spheres, but with invigorated conceptions, and exalted desires. His sun and system swell upon his view. His own planet resumes its colossal magnitude. The mighty ocean and the everlasting hills recover their grandeur. His country—his home, again rouse the warm associations of love and duty. The

earth on which he treads becomes the subject of his scrutiny. He surveys its domains—its oceans teeming with life, and its forests ringing with the cries of their ferocious occupants. He penetrates its depths—he ponders over the cycles of once living forms, now entombed in its catacombs of stone. He numbers the catastrophes which overwhelmed them. He discovers the seat and elements of the destroying force; and without the exercise of faith, with the sharp glance of his reason, he recognizes the Great Creator presiding at each catastrophe, to revive, in nobler forms, the beings he has extinguished, and to prepare his infant world for the reception of a race which is to bear his image, and enjoy his favour, and advance his glory. Thus familiar with the mechanism of forms that breathe, and of natures that suffer,—life past, life present, and life to come, are ideas of deep interest and frequent recurrence. The measured span of his own existence, upon which every day encroaches, and the fixed hour at which he is to be “released from clay,” which every pulsation hastens, add solemnity to his studies, and anxiety to his aspirations;—and to those heavens and those stars to which he once looked but with the proud eye of reason, he now addresses the language of faith and hope, without desiring and without dreading the transition which he hails.

Bright star of Eve, that send'st thy softening ray
Through the dim twilight of this nether sky,
I hail thy beam like rising of the day,
Hast thou a home for me when I shall die?

Is there a spot within thy radiant sphere
Where love and faith and truth again may dwell,
Where I may seek the rest I find not here,
And clasp the cherish'd forms I loved so well?

- ART. IX.—1. *Quarterly Review*, No. CLI., Art. IX.—Ireland.
 2. *The Catholic Claims. A Letter to the Lord Bishop of Cashel.* By BAPTIST W. NOEL, M.A. London, 1845.
 3. *The Catholic Claims Considered. A Review of a Letter to the Lord Bishop of Cashel, in the Irish Monthly Magazine for September 1845.*

THE “ideal of a Christian Church” has become, in our day, not a theoretical, but a great practical question; it has ceased to be a merely speculative subject of inquiry and discussion—it has resumed its place among the elements of action as well as of thought; and it seems likely to possess that character more and more every day. The relations of Christian communities among themselves, and still more, the relations between them and the civil governments with which they come in contact, are probably on the eve, either of a re-adjustment, or of a revolution; and doubtful disputations, which many imagined to have been for ever banished to the shelves of unread libraries, and the closets of dreamy students, are again mixed up with the actual measures and daily business transactions, not of ecclesiastical bodies only, but even of Cabinets and Parliaments.

Is there a Church of Christ—in any sense—that is not mystic and intangible?—and, if so, what is it? and how are the multitudinous and motley sections, all claiming that appellation, to be grouped and marshalled in anything like order?—are inquiries which men of affairs would gladly evade, or leave to men of erudite and idle leisure. But, irksome as they are, such questions as these are forcing themselves on the attention of the most exclusively secular politicians. On the other hand, the adjustment of the province belonging to civil government, and the duty devolving on it, in reference to religion, is not only in danger of being run up into an insoluble knot, but threatens also to become one that must be summarily cut. Plausible abstractions and theories of optimism in the argument between Established-Church and Voluntary divines, will no longer meet the emergency; the sweeping application of a general formula—as that the State has nothing to do with religion, or that it has everything to do with it—is now irrelevant or impossible; and controversialists, who might find it more convenient to deal with axiomatic universals, in a sort of algebraic and imaginary equation, must consent to encounter practically the vulgar fractions of an arithmetical balance among existing quantities, each element of which seems to be taking more the shape of a mixed or broken number—as the whole calculation proves to be more complicated—than the mere framers of a system, on either side, were inclined to suppose.

In these circumstances—when the statesman must have so

deep a concern, or thinks he must have so deep a concern, with matters ecclesiastical, and the churchman is forced so largely to admit the exigencies of civil politics, as disturbing, if not regulating, elements, into his more spiritual calculations—the inquirer is thrown back upon first principles, as well as forward upon ultimate results, and it becomes important to aim at an equitable and practicable adjustment.

Priestcraft, state-craft, or king-craft, and, if a new coinage be allowed, conventicle or sect-craft, may be regarded as the symbolic terms of the three alternative ideas respecting any religious institute or association, of which alone it ever enters into the mind of a politician to conceive. All order and organization for cherishing or expressing the religious sentiment, he at once sets down, either to the invention of interested parties, ecclesiastical or civil, who seek to manage the religious spirit in the masses of mankind, or to the spontaneous impulse of their own individual or gregarious wills. That the clergy or priesthood should seek to maintain a church system which may aggrandize themselves, is admitted to be natural, but dangerous; that civil governments should aim at wresting this power out of their hands, is equally natural, and as it would seem, somewhat safer; that the reins should fall from the grasp of both, and the entire religious community be left, each to do what is right in his own eyes, with no King in Israel, is held to be the only remaining possibility, and is dreaded and deprecated as the worst of all. It would be a great matter to get men persuaded to admit that God can govern his own Church on earth. That he is the Lord of individual consciences, and, as such, both entitled and competent to regulate every individual's private faith, so that it is intolerance and persecution for any other to interfere with him, is now all but universally allowed. But there is an unwillingness to recognize in reference to a society, what is admitted in regard to individuals. Private religion, or as the phrase goes, what is between a man's own conscience and his God, is to be respected and held sacred; but any thing like public religion, or what is to bind men together for government or for action, if it be not a spiritual despotism on the one hand, or a civil ordinance on the other, can be nothing more than voluntary combination or conspiracy; and in any view of it, therefore, may and must be capable of compromise and modification on principles of accommodation and expediency.

We may observe, in passing, that this may partly explain the limitation which some would practically impose upon the great law of toleration. When it is a question of individual opinion that is raised, liberty of thought and speech is fully conceded; but when it takes the form of a church-controversy, or an adherence to one communion rather than another, the same indulgence

is not considered necessary; and liberty of action is abridged or restrained. To employ measures of coercion for the purpose of dictating to a man what he is to believe, in the smallest particular affecting his personal salvation, would be universally reprobated, as an attempt to interfere between him and his God; but if it is merely to prescribe to him what his Church shall be, and if the point at issue be not a matter of doctrine, but one of discipline or order,—for such is the favourite and fashionable discrimination with many,—in that case, the use of influence and authority is felt or fancied to be more legitimate. And the reason, at least in part, may be, that while the whole range of personal belief, if we may so call it, is undeniably within the domain of conscience—the agitated questions of preference or precedency among the various modes of church polity are supposed to lie more towards the region of mere will. Hence, those who would be very far from stigmatizing as “heretical pravity,” a man’s peculiarity of view on such subjects as Justification and the kindred doctrines of Grace, have little hesitation in setting down to mere caprice and perverse obstinacy his scruple about belonging to a particular communion; to tamper with the former, would be to wage war with conscience—to overmaster or overpersuade the latter is a mere victory over will; and it is good to get the better of narrow-minded prejudice and pride.

We need scarcely say that such a distinction as this is one which cannot stand in argument for a moment, even on the assumption of the parties themselves, who seem, if not formally to avow, yet tacitly to act upon it. Be it will, or conscience, in the recusant—the whim of an hour or the conviction of his life—he is still equally entitled to forbearance and freedom in following it out; for who has given to the persecutor a right to lord it over the will, more than over the conscience, of his dependents? But we advert to this topic for the purpose of illustration; and, returning to our subject, we repeat the remark, that very much of the perplexity of politicians, in dealing with religion, arises from their incredulity as to the existence and power of the religious spirit generally, and more particularly, from their fixed persuasion, that in religious communities, at least, if not in individuals, it is a stubborn contest for power, not the stern force of principle, whether right or wrong, that raises all the difficulty. It is always dangerous, in the field of moral warfare, to assume, or to proceed upon the assumption of, the adversary’s insincerity; it is like miscalculating and underestimating an enemy’s strength on the eve of a general engagement. The coarse maxim, that “every man has his price,” was a blunder, even in an age of moral and spiritual collapse. It is doubly a blunder now, when an earnest awakening has taken place. To respect, not indeed

the creed, but the conscientiousness, of the fanatic, has become a point of politeness with the man of the world, and of necessary wisdom with the man of affairs ; and, as an individual believer, the Christian may, for the most part, reckon on his private opinion being held sacred. But a Church—a collective body or community of Christians—is another matter ; its organization, as well as its origin, is understood to be, in a great degree, artificial and conventional, and as such, may be reasonably expected or required to be more flexible and pliable than the convictions of a man's own mind, over which even he himself has no direct control. Hence, while individual belief is to be admitted as confessedly a fixed quantity into the reckoning of statesmen, or as an irreducible element, incapable of being worked out of the equation, which, therefore, must have allowance made for it,—no such necessity is felt or acknowledged in reference to Churches in their collective capacity. These, on the contrary, are viewed very much as clubs, or affiliated societies, which may become the instruments of civil authority, or its rivals ; but which, in either case, are to be treated as mere priestly or popular institutions, having nothing in or about them that should exempt them from the application of the ordinary rules of expediency, by which political men would contrive to balance and govern all things.

What an entirely new turn, for instance, would be given to our national counsels, were it once really perceived that the Church-ideal, so to speak, or the Church-exemplar—the notion, that is, of a Church and of its functions—is no human invention, but a part of the purpose and revelation of God ; nay, were it only seen that this is the honest impression of Christians, and that possibly it may be correct ! It is a great step gained when statesmen, though not themselves religious, believe in the reality and power of the religious, spirit in others ; the worst follies and crimes of the misgoverned world have arisen from the want of this belief. It is not that we insist on rulers having faith themselves ; all we ask is that they shall have faith in the fact of their people's faith. Massacres and murders, as well as proscriptions and disruptions, might have been avoided, had men in power been wise enough to believe that men out of power could believe ; or, in other words, that their convictions might possibly be strong and earnest. And so of the Church—let statesmen make of it what they may—they must lay their account with having something more than a mere strife of opposing wills to manage. For it is high time they should know, that, however Christians may be divided among themselves, as to what the Church is, they all, or nearly all, hold it to be a divine ordinance. Let its government be Prelatic, Presbyterian, or Congregational—and be its ministry hereditary, patronate, or elective—still, the almost universal impres-

sion among religious men is, that a visible church-fellowship and order is the result, not of voluntary association, but of divine appointment. And the sooner our rulers become thoroughly aware that they have this element to deal with, the better for themselves and the country.

But it is time to leave these generalities and come to the practical and urgent questions of our present political and ecclesiastical controversy which have suggested them.

The endowment of the Church of Rome in Ireland, for which the way is now prepared, is both advocated and opposed on grounds, which almost equally tend to open up inquiries of a far wider application. It is true, the measure, whether as originally planned by Pitt, or as now revived by those who use, or abuse, his name, has always hitherto been suggested in the character of a special expedient, fitted to meet a special exigency. Its advocates have usually sought to avoid the raising of any general topics of discussion, relative to endowments or establishments, and have rested their case on special pleadings respecting the peculiar state of Ireland. We have mentioned Mr. Pitt, as the first author of this plan; and we may be allowed to remark that in his time, and in the circumstances in which he proposed it, it was easier to give it the aspect we have indicated, than it can possibly be now. On this subject, we have been struck with the elaborate attempt recently made in the pages of the *Quarterly Review*, to turn the authority of that great name to account; and we have been led to ask ourselves if it be indeed so very clear, as our contemporary takes it for granted it is, that his oracle would have given forth the same utterance now, as in the days of the Irish Union? The matter may not be very important; but it is worth a moment's notice. We shall first give the substance of the reviewer's statement, and then offer an observation or two in regard to it.

"We can well understand the feelings and conduct of secluded students, who have studied everything but the history of their own times—of Protestant divines especially, who have never been in any way mixed up in the practical politics and political associations of the last half century. The *standum super vias antiquas* of these gentlemen we understand: but can we, without a smile of wonder, see the most distinguished members of the Pitt Club, and the loudest professors of Pitt principles, resting their claims to consistency on an opposition to Mr. Pitt's policy and pledges—not, like Reform, the hasty impulse of his inexperience—but the sober, deliberate, and reiterated opinions of his later life? They claim to be the exclusive heirs and representatives, as it were, of Mr. Pitt; and, as sometimes happens in private life, they are very angry with the executors for their readiness to pay the *legacies of the testator*; for assuredly no metaphor ever approached more nearly to literal accuracy than the description of '*Emancipation*,'

'Maynooth College,' and a 'State provision for the Roman Catholic clergy of Ireland,' as the legacies of Mr. Pitt to his country: and wise or unfortunate, prudent or improvident, as these legacies may be deemed by different judgments—they *must be paid*. A large portion has been, after a long and irritating litigation, already discharged. It is now, we think, obvious that the rest, in spite of a litigation as active perhaps, but we trust not to be protracted to the ultimate ruin of the *estate*, must follow; and the adverse litigation cannot be with much grace or consistency maintained by those who profess a peculiar reverence for the memory of *Mr. Pitt*. In addition to what every body—except the Pitt Club—knows of Mr. Pitt's proceedings in these matters, new evidence has been just now produced, such as, when calmly considered, must have a great weight with every one who reverences the memory of Pitt.

"Mr. Maurice Fitzgerald, the Knight of Kerry, now we believe the only survivor, besides the Duke of Wellington, of those who professed Mr. Pitt's politics in the Irish Parliament, has, in his 'Letter to Sir Robert Peel,' very opportunely given his testimony as to Mr. Pitt's views and pledges, and his advice as to their accomplishment. The following extracts will not, we are sure, be thought too long by any reader:—

* * * 'I hear you bitterly assailed for having, as it is said, commenced a series of conciliatory measures towards the Roman Catholics of Ireland. The only practical crime of which you at present stand convicted, is your having pertinaciously urged through the House of Commons an increase of a few thousand pounds for the more cleanly and decent education of Roman Catholic priests. I would wish to dismiss here the really insignificant subject of Maynooth: that College was established on the suggestion of Mr. Burke, as a permanent institution, no doubt to be enlarged and improved according to the exigencies of the Roman Catholic Church. It formed but a small item in the catalogue of measures contemplated by Mr. Pitt for the amelioration of Ireland.

'Very grave gentlemen assure me that this is a first step in an awful revolutionary career. I will not, for a moment, doubt that many of my Conservative friends, and of the religious public, are actuated in their alarm upon this subject by the most sincere and honest views; but I cannot help asking myself whether these persons have ever heard or read of a measure called the Legislative Union between Great Britain and Ireland: if they have, they seem to have totally forgotten it. It is my misfortune to be old enough to have a very lively recollection of that event. I was elected to the Irish Parliament in 1795, a pupil in the school of Burke, and an humble but ardent supporter of the general policy of Mr. Pitt. I served long enough in the Parliament of College Green to be thoroughly disgusted with its political corruption, its narrow bigotry, and the exclusive spirit of monopoly with which it misgoverned Ireland. When the measure of a Union was announced to me with all due mystery, I was able to give an answer by return of post, expressing my great

gratification at the prospect, and only conditioning that the terms should be just and honourable for Ireland. My acquaintance with Lord Castlereagh, under a sympathy and perfect coincidence as to all the measures of Lord Cornwallis's government, ripened into the most cordial intimacy. Not only did I enjoy his personal confidence, but I was advanced rapidly, though then very young, over the heads of powerful political aspirants to the highest official departments under the Government; and I was, by this concurrence of circumstances, in the inmost confidence of Lord Cornwallis's counsels.

'The tenor of Mr. Pitt's speeches had clearly indicated a liberal policy towards the Roman Catholics: thence sprung the general *hostility* of the zealous *Protestants* to the Union. The same cause attracted to it the *good will* of the *Roman Catholics*. As the policy of the measure developed itself, those opposite feelings were more distinctly manifested. The compact and energetic resistance was composed of the more zealous Protestants of the North, a sturdy band of the old jobbers, and a remnant of the Whig opposition. Its supporters were all those whom the Government could influence, and such independent persons as duly estimated the enlightened policy of Mr. Pitt. We were backed up by the very general popularity of the measure among the *gentry of both persuasions, and the Roman Catholic population of Munster and Connaught*.

'When I look back to the general scheme of *practical relief* and enlightened concession towards the Roman Catholics, projected by Mr. Pitt at the period of the Union, and reflect that, after forty-five years of lamentable procrastination, your attempt to accomplish so mere a fraction of that scheme shall have excited such unexampled clamour, I do indeed stand amazed.

'Why, sir, if you are chargeable with an indifference to our institutions, and an intention of endangering Protestantism by endowing the Roman Catholic clergy, what must have been Mr. Pitt's case? Mr. Pitt, who had no such pressure from without to embarrass him as now affects your Government—Mr. Pitt, at the head of the strongest ministry that ever existed in England—supported by the great Whig aristocracy which passed over to him under the influence of Mr. Burke—with a powerless and unpopular opposition—Mr. Pitt deliberately and advisedly propounds a plan of which what you are said to have in hand is not a twentieth part. Why, sir, if your denouncers are right, Mr. Pitt must have been a traitor to his sovereign—his country—and his religion.

'From that elevation and security, contemplating the inherent distractions of Ireland, and well knowing the impossibility of remedying them through a mere domestic Parliament, he devised the noble expedient of elevating the smaller country by a comprehensive identification with England, including the total abolition of all civil and political disabilities founded on religious grounds. That such were his purposes I can testify. They were communicated to me most unreservedly by Lord Cornwallis. I hold in my hands a confidential letter from Lord Castlereagh, dated 22d June 1802, recognizing the *pledges given at*

the Union to the Roman Catholics of Ireland, for which they gave valuable consideration in their support of that measure (without which it could not have been carried), and further instructing me to endeavour to reconcile the heads of their hierarchy to a delay in the performance of the engagements made to them by Mr. Pitt's ministry for the endowment of their Church. Dr. Moylan, a justly venerated prelate, had then recently intimated to Lord Cornwallis the cheerful acquiescence of the Roman Catholic Bishops in the endowment of their Church.

'The extension of the Regium Donum to the Presbyterians had been just then obtained by Lord Castlereagh; but circumstances of a then very delicate nature, but now well understood, prevented Lord Castlereagh and Mr. Pitt from pressing the Catholic Claim: *I acted on the negotiation committed to me, and succeeded.*

'No man of the slightest political knowledge can doubt that, but for the King's illness and his necessary withdrawal from power, Mr. Pitt could immediately after the Union have carried through Parliament, with an overwhelming majority of both Houses, his measures for the complete political relief of the Roman Catholics and the endowment of their Church: and to Mr. Pitt's intentions on that subject *I personally testify on the authority of Lord Cornwallis.*' * * *

It is no very material concern of ours to conjecture what Mr. Pitt might possibly have said and done now; but we cannot help thinking that he might have viewed the case differently had he been called to deal with such a crisis as the present. The measure, with him, was immediately connected with the carrying of the Union between Great Britain and Ireland, being designed mainly to facilitate the Union, and to smooth over the difficulties of his position in reference to that event; but whether he would have considered the passing of the measure now, after so long delay, and in the greatly altered circumstances of the country, as likely to accomplish all the beneficial effects he then anticipated, may at least be doubted. One thing, for example, is clear, that the religious scruples of the country were by no means so unequivocally against the measure then, as they are now. The emancipation of the Roman Catholics was the great subject of religious alarm, not their endowment. Even George III., it would seem, had no serious objection to the latter; as is proved by the reviewer himself:—

"In 1803 Lord Castlereagh was, as he stated, 'authorized under Lord Sidmouth's Administration to communicate to the Catholic clergy that it was in contemplation of the Government to make a proposition for a pecuniary provision on their behalf to Parliament: they stated in the most respectful and disinterested manner, that they could not, consistently with *duty and honour*, receive such a mark of grace and favour at that moment.'"—*Hansard*, 29th March 1821.

"We know nothing of the circumstances of this offer and refusal, which were only mentioned incidentally by Lord Castlereagh in his

speech on Mr. Croker's motion for a provision for the Roman Catholic clergy in 1821; but there can be little doubt that it was declined 'from honour and duty,' because it was not accompanied by a prospect of lay emancipation. We know, however, Lord Sidmouth's own personal opinion on the subject:—

'He was clearly in favour of a provision for such of the priests as would accept it; and he thought that there was a time when they would have received it *from him* (alluding, no doubt, to Lord Castlereagh's negotiation in 1803.) He considered that it would effectually *bind them over to keep the peace*, and prove themselves faithful subjects; and so far from thinking that it would be an encouragement to Popery, he argued that it would be only placing them on a footing with the dissenting ministers of Ireland who accepted the Regium Donum, and could not possibly be regarded as a recognition of Popery in a religious point of view.'

"This is a most important fact—that Mr. Addington's Administration, which held office solely by its concurrence in George III.'s resistance to what was called Emancipation, and in which *Mr. Percival* was at this period *Attorney-General*, should have been willing—as his Majesty must also have been—to pay the Irish Catholic clergy."

It is to be remembered, also, that the entire question of endowments, as well as of the relation between Church and State, has assumed a new aspect since that era. The pensioning or salarizing of the priests might then have been carried as an isolated measure, without suggesting so extensively troublesome doubts and difficulties respecting all Establishments together. The English and Scottish Churches were by no means so precariously situated then, as now; and it is at least conceivable that so sagacious a mind as Mr. Pitt's, might have hesitated about reviving, after so long a slumber, and amid such combustible materials, an element so dangerous; and might have fallen upon other measures of practical reform for alleviating the grievances and conciliating the affections of Ireland. But, be this as it may, it is, at all events, very evident that the advocacy of the measure now, does, in point of fact, agitate more general topics of delicate and critical debate, than it was likely to do when it formed a part of Mr. Pitt's scheme of Irish policy.

Of the various considerations brought forward by the reviewer in support of the anticipated Roman Catholic endowment, there are two which it is worth while to single out, as illustrating the principles applicable to all Churches, which politicians are prepared to act upon and to avow.

The first of these very completely abolishes the conscience of the State, in the matter of endowments; the second is for debauching the conscience of the Church.

As to the first, the reasoning is very explicit:—

"Will any Protestant deny in the abstract that it is the duty of the

State to provide for the religious and moral guidance of so large a body of its subjects? We might wish—if visionary wishes were worth indulging—that we could supply it for all from the one pure fountain of our own sanctuary—that the Hindoos and Mahomedans of our Eastern world were Christians—that there were no Presbyterians in Scotland, and no Roman Catholics in Ireland, Malta, and Canada—that the British empire, in short, were a religious Utopia: but it is not so, and cannot be made so; and it is our destiny and our duty to deal with a different state of things, and to employ the means in our hands for purposes within our reach. But it is said that the guides that we propose to pay, entertain and teach certain doctrinal errors which the State should on the contrary discountenance. We will not enter upon these doctrinal points, on which seven-eighths of Christendom would be against us;—but we ask again, are any other guides possible? Have we even the extreme alternative of ‘*these or none?*’ We have not. *These* we have, and *these we must continue to have*; and surely the lower any one may rate the actual fitness of these inevitable functionaries for their important duties, the stronger should be the desire to see them elevated in the scale of intelligence and respectability. The Duke of Cambridge in the Maynooth debate put the case in a short and cogent form—‘If you want good scholars, you must have good teachers.’”

Clearly then, the nation that endows is to have no conscience, or sense of difference between truth and error. Nor is it less clear that the parties accepting the endowment are expected soon to have no conscience either. Thus, in dealing with the objection arising out of the alleged aversion of the Irish priests to accept of an endowment, the reviewer mainly relies on the witty and worldly argument of the late canon of St. Paul’s, (Sydney Smith) which, but for his excellent fooling, would be really nothing more or less than an unblushing avowal of a design to make men relinquish what they deem real scruples of conscience, by a sordid appeal, not to their reason, but to their pockets. The somewhat profane levity of the reverend jester, our contemporary quotes with marked complacency, characterizing it as “arising from a shrewd estimate of human nature in general.” And, indeed, his great plea is, that the sum required will be comparatively trifling; and that it will go far in the way of

“Hush-money, Mr. O’Connell may call it. And if it were hush-money, would it not be well applied?—but in fact it is in no other sense hush-money than that the diffusion of liberal education and personal comfort may naturally be expected to explain misunderstandings—assuage animosities—promote mutual charity, and tend to the peace and prosperity of our common country.”

“Liberal education and *personal comfort!*” It is decent to combine the two; but it is manifestly on the influence of the latter that the reviewer lays his chief stress. His whole reason-

ing we repeat, is founded on the appeal to the pocket. See, he says to the British public, how little this scheme will cost you—less than *the auction duty*—only half what it cost you to abolish slavery; and if you doubt how far your friends in the Irish priesthood may think it right or lawful to accept your boon, trust, he slyly adds, to “a shrewd estimate of human nature,” and the effect of “personal comfort.” Scruple or not, with or without conscience, rely on their clutching the bribe, sooner or later, and being all the quieter for it.

“Our first observation is, that the celibacy of the Roman Catholic clergy makes so essential a difference between them and the Protestant clergy in domestic expense, * * and that Lord Francis’s scale *ought* to be quite satisfactory.* It is very nearly twice as much as is allowed to the Roman Catholic hierarchy of France. * * *

We should wish, however, to see some slight amendments on his scale: for instance, some distinction might be made in the incomes of the archbishops of Armagh and Dublin—for the first, on account of his primacy; for the latter, of the more expensive residence in the capital; and so we think the bishops of Cork and Down—the latter residing in Belfast—should have something more than the bishops of less expensive dioceses. In one report of Lord Francis’s speech his estimate for deaneries is stated at £400, and in another at £300; we should adopt these sums as the extremes, and allot them to two classes of deans. With regard to the parish priests and curates, we see that the actual number exceeds by about 150 his calculation: that would make an addition of from £10,000 to £15,000.

“These additions would perhaps be covered by his Lordship’s original estimate of £250,000: but suppose that the whole expense were to amount in round numbers to £300,000, it falls short by a fourth of £400,000, the sum proposed by Sydney Smith, who probably had not looked accurately at the numbers; and we are satisfied that Mr. Goulburn would still say, in 1846 as he did in 1825, that, ‘*if the measure could be shown to be a beneficial one*, the sum itself was not of sufficient importance to impede it.’ It is curious and not unimportant to observe, that even the extreme sum of £300,000 is exactly the amount remitted this session in the *Auction Duty*! and we may add that the value, even at the present high prices, of the annuity of £300,000 would be ten millions—half the amount that we were willing to pay for effecting the slave emancipation of our West

* The scale proposed was as follows:—

4 Archbishops, at £1500 each,	. . . . .	£6,000
22 Bishops, at £1000 each,	. . . . .	22,000
30 Deans, at £300 each,	. . . . .	9,000
2000 Priests, at £60, £120, and £200 each,	. . . . .	196,000

£233,000

In different reports of Lord Francis’s speech, there are discrepancies in the items, but he stated the total amount at a round sum of £250,000.

India islands. We presume we need not insult the feelings and understandings of the country with one word more on the objection of finance—Oh, what an economical and profitable *expense* that would be!

“But suppose it passed—wouldt he priesthood accept it? We believe they would—*and immediately*—if presented to them, as we trust it would be, in a way not to compromise in any degree either their personal independence or their religious liberty. The State of course would be entitled, and indeed bound, to demand sufficient securities for the fitness of the person, and the due execution of the duty, such as the Roman Catholics of Ireland have already offered, and such as the Church of Rome concedes to all other—even Protestant—sovereigns. The Government can desire no unworthy influence over the Roman Catholic clergy, but on the other hand it cannot submit that the Crown of England should be treated with a less respectful and honourable confidence than other Protestant States. As the Government would probably make no new demand whatsoever, and be content with such regulations as are already conceded to other powers, these and such like mere points of business might, we presume, be arranged without creating scruples in any sincere mind. But we doubt whether it would be expedient to embarrass the individual members of the Roman Catholic Hierarchy by asking their *previous assent* to the arrangement;—it should be treated, not as a matter of negotiation between parties, but as the authoritative execution of a great administrative duty on the part of the Government—a provision which the parties might *take or leave* as they should think proper. The best way perhaps would be to grant the sum in general terms, on certain general conditions, to such of the clergy as should be entitled and willing to accept it, with perhaps the specification of the classes of clergy—archbishops, bishops, deans, priests, and curates—to whom it was to apply, and fixing the maximum and minimum of each class; but in all other respects leaving the details to be adjusted by Her Majesty or the Lord-Lieutenant in council;—but with two provisos—that any increase of the numbers should be defrayed out of the original sum by a proportionable deduction from the class in which the increase is made;—and that in case any individual clergyman should at any time decline to receive the allotted stipend, the same should be paid to the fund of Charitable Bequests, and employed either towards a *specific* endowment for the particular diocese or parish filled by the person so declining, or for general purposes, as might be thought most expedient—permitting always the party to withdraw his refusal, and to receive the stipend for the current, and, if due, one antecedent year.”

Thus all is cut and dry; the salaries and stipends are all duly calculated; the exact gradation—from his grace the “primate,” down through the deans, vibrating between £300 and £400, to the poor priest or curate “passing rich” upon his £60—is adjusted to a nicety: “personal independence and religious liberty” are secured,—the very idea of the State attaching conditions, or

desiring “an unworthy influence,” being repudiated with indignation,—(are they to have what was declared to be intolerable in Scotland, state-pay without state-control?)—and the giving in of scrupulous and squeamish consciences, with an eye to “personal comfort,” is anticipated from year to year. All is conceded, save “the Crown and Great Seal” to the Laity, and seats in the House of Lords to the Bishops. And yet even as to this last reservation, there is an “if”—which is, as usual, “a great peace-maker;” and for the sake of that perfect equality between Anglicans and Romanists in Ireland, which is to be the panacea for all its disorders, the reviewer would almost relent in favour of the excluded Prelates, could they but consent to make some slight concessions, as to patronage and the Queen’s supremacy, (p. 294.) He has the entire scheme in his eye; and almost sees, in bright perspective, the whole Irish priesthood tamed, and Dr. M’Hale kissing hands at Court, on the issuing of a Royal *congé d’élire* in his favour, and a call to don his ample sleeves of lawn among the Princes and Peers of England.

Such is Conservatism; and such the friendly and equal alliance it would make between the two Episcopal and sister Churches. For “depend upon it,” says our Sir Oracle—and “when he opes his mouth, let no dog bark”—

“Depend upon it, that this is, to the Romish and the Protestant Church, a *common cause*. Establishments strengthen establishments; endowment supports endowment; and we are firmly convinced that the most protective laws which the most favouring legislature could devise to guard the Protestant Church in Ireland, would be weak and ineffective in comparison with such a recognition and establishment of the Roman Church as we advocate. As surely as we may confide in the scriptural axiom that ‘wisdom is a defence and money is a defence,’ so surely will this joint application of money and wisdom be a defence to the Established Church.”

But if equality be the order of the day, there are two ways of getting at it. The Conservative reviewer has one scheme; a Liberal Churchman has proposed another.

The Hon. and Rev. Baptist Noel stands very much alone, we fear, in the Established Church of England; and it seems to be too generally the understood rule among many of his brethren to represent any opinion of his verging towards liberal views as an anomaly and extravagance, which sound churchmanship will scarcely condescend to answer. It is not our province to vindicate the position of that distinguished man; nor need we say that he always reasons or acts with perfect consistency. In the pamphlet before us, we have noticed a few inaccuracies of reasoning, which are comparatively unimportant; but the noble

and generous strain of the whole is beyond all praise. Mr. Noel writes with a hearty and fearless honesty of purpose, which exposes him to the captious cavils of small critics, but which, in our opinion, would be ill exchanged for more measured and timid caution. He is no admirer of Popery; in one passage of surpassing eloquence, he denounces its spiritual usurpations and social corruptions and crimes. He is no soft and gentle opponent of the scheme for endowing it; he threatens action in right good earnest, and with a vehemence that might startle the mild apologists of Rome in the British Cabinet and Senate. But, on the other hand, he deals in no indiscriminate abuse of the Premier, for the difficulties of whose position he makes full and frank allowance; and so far from harbouring any bitterness or jealous suspicion in reference to the Roman Catholic population of Ireland, his whole heart overflows with sympathy. We shall take an extract or two, from the first part of his letter to the Bishop of Cashel, as an illustration of his spirit.

After enumerating the penal statutes against the Roman Catholics, now happily repealed, but repealed too late for Britain's honour and Ireland's peace, he thus proceeds to speak of the Maynooth endowment:—

“For myself, could I overcome my religious objections to it, I should heartily rejoice in this grant as the pledge given by a Conservative Government that they mean to legislate for the Catholics in a just and liberal spirit. Than this, nothing can be more necessary for the peace of the empire. And for leading the great Conservative party to a sense of this duty, Sir Robert Peel deserves the thanks of his country. Let us not blind our eyes to the difficulties of the Government. Noble as the task may be which is committed to their sagacity and firmness, it is yet most arduous. To conciliate millions embittered by long years of mis-rule, to obliterate the memory of wrongs which have made the very name of Saxon England odious to them, to conquer by kindness those who hate us, and to make those who now impatiently endure their connexion with us as a hateful yoke, identify it with their freedom, esteem it to be their glory, and associate it with all their aspirations after national greatness and prosperity, is no easy task: and if Sir Robert Peel has made an attempt to fulfil this great duty, religious men, ought, as I think, to applaud the design, and support with ready zeal every well-principled measure which may lead to its accomplishment. The importance of this design, felt by statesmen of every party, has carried the Maynooth Bill through Parliament by such large majorities. Nor should we, who have opposed this measure, speak with unmixed severity of the votes even of religious men in its favour. I believe that they have greatly erred; and they chiefly are responsible to God, for a grant in support of doctrines totally opposed to the gospel of Christ, because their unanimous opposition would probably have been fatal to it. But they were under

great temptations ; not merely those arising from personal and party considerations, but those which rested upon much more generous feelings. If they refused to conciliate the Catholics, they might become responsible for all the horrors of a furious civil war : and not seeing how otherwise to avert this great catastrophe, they have forced themselves to begin a conciliatory policy by affording an improved education to the priests. However strong may be the feelings which we entertain against this measure, we ought to do justice both to those who are its objects, and to those who have carried it." * * * *

And again, adverting to what some are apt to maintain, as to the Irish Roman Catholics being incapable of conciliation, he thus states and meets the objection :—

" This, indeed, is by some persons of heated imagination declared to be impossible. According to them, both priests and people are bent on Popish ascendancy, to which they are bound by ancestral recollections, by the doctrines of their Church, by the exhortations of their clergy, and by their own settled hatred of England and of Protestantism. Nothing, as these gentlemen think, will satisfy them but ' Ireland for the Irish.' The ultimate meaning of which is a separate kingdom, a Papal monarch, a Papal parliament, a Papal establishment, and a Papal people, from among whom, every Protestant landlord, minister, and peasant, shall have vanished by expatriation or by massacre.

" Now, my Lord, I profoundly disbelieve it all. Men cannot divest themselves of human nature ; and, though Catholicism may be exclusive and cruel, and Catholic priests might wish to re-enact the Inquisition, the Catholic people are still like ourselves. They know well that such designs would be unjust to us, and therefore fatal to themselves ; and the spirit of Papal Europe would condemn them. Papal France, instead of exterminating the Protestants, has given them equal privileges with the Catholics ; Belgium, more intensely Catholic, has imitated the liberal example ; and the same tendencies are discernible in the Catholic populations both of Italy and Spain. While, therefore, the Irish Catholics ask for nothing but legal equality with Protestants, the Government is bound to believe them sincere in assigning these limits to their desire, till they see proofs of the contrary ; and not refuse concession to their fair demands, because some persons, who fancy that they have more penetration than their neighbours, impute to them concealed designs of violence and plunder. I believe these designs not to exist, because they are disavowed by upright and honourable men ; because they would be no less foolish than wicked ; and because there is no evidence for them. But should they ever come into existence, this country, with clear justice on its side, would, with the blessing of God, speedily extinguish them."

In this large and truly catholic temper of mind, does Mr. Noel go on, first to discuss the principle of an indiscriminate endowment of all sects, and secondly, to set forth and defend at large his own plan for conciliating Ireland.

As to the first, he speaks plainly and strongly :—

The doctrine “appears to make the principle of legislation on religious subjects completely infidel. According to it, religious men in Parliament are not entitled to ask whether any doctrine which claims parliamentary support is true or false, useful or mischievous, honourable to God or offensive to Him ; but if the support be required by a body of tax-payers, or if it be demanded by an apparent political expediency, then it must be granted, though it may be to falsehood, to superstition, or to ungodliness. If the present state of opinion renders it impossible to maintain the ministers of one Christian denomination exclusively, because other denominations esteem this to be unjust, then the State may, without breach of Christian principle, cease to maintain them, as in the United States ; but to maintain the teachers of superstition or of infidelity together with those who preach the Gospel, is to despise the Gospel, and to degrade its ministers. If this is to be henceforth the dominant principle of legislation on religious subjects, every Christian ought to use his utmost efforts to rescue all religious questions from the hands of our legislators. If Parliament cannot legislate in favour of true religion, they are bound not to legislate against it : if they think it imprudent to support the truth alone, let them leave both truth and error unsupported : if Protestantism can only be cherished at the cost of patronizing Romanism, let both be left to themselves.

“ This principle of paying all creeds is so irreligious, that no nation which is not generally irreligious can long endure it. On this account it seems probable that the maintenance of the Roman Catholic priests would seal the doom of the three Establishments in England, Scotland, and Ireland. Institutions are built on principles ; and when the fundamental principle of an institution is generally abandoned, the institution itself must soon fall. Hitherto the Establishments of the United Kingdom have been upheld chiefly by the idea that a Christian legislature is bound to provide for the Christian instruction of the whole people ; but that idea being exchanged for the notion that Parliament has nothing to do with theology, but must support the creed of the many, the Christian advocates of Establishments have no longer any principle to contend for. And should they resort to the lower considerations of expediency, as the only remaining method by which they can defend these Establishments, even these, like a battery carried by the enemy, are turned by the new doctrine against them ; since it must be worse than useless to maintain a body of sound teachers for the nation, on the condition that a larger body of false teachers shall also be maintained, to defeat all their efforts. Already has the *Maynooth Bill* given the greatest shock to the Establishments of the United Kingdom which they have yet received ; and should its principle lead further to the endowment of the Roman Catholic Church, they must shortly fall.”

Then as to the second, he thus boldly announces, what he must have been well aware, would sound like an alarm-bell in the ears of his Episcopal brethren :—

"Must we then resign ourselves to eternal strife with our countrymen? * * Nothing of the sort. Let us remember, that what the Catholics ask is simply equality with Protestants; * * and who can say that their demand is unreasonable? Then if they may reasonably claim religious equality, and yet as Protestants we ought not to sanction their errors, the obvious course is, to give them equality some other way. If religious principle forbids that we should place the priests on an equality with Protestant ministers by voting for their public support, what principle forbids us to place them on that equality, by removing the obnoxious privileges of the Protestants?"

"On all accounts the second course is to be preferred. If the Catholics must be conciliated, and only two methods of conciliation are proposed, the one, to pay teachers of all denominations, and the other, to pay none, can a Christian hesitate which to choose? Here I gratefully recall your own declaration to the House of Lords, 'that you would far prefer the putting away of all establishments, to the endowing of two or three religions.' In that sentiment, my Lord, I heartily concur; and as the Irish priests must be endowed, or the endowments of the Protestant Church be sacrificed, the time seems come when this sacrifice must be made;"—

—a sacrifice, as he proves at large, neither impracticable nor severe:—

"I do not conceal from myself that the result of this surrender might be a reduction in the numbers of the Protestant ministers, although their maintenance on their present footing, would only cost to the members of the Irish Church, who possess much of the wealth of the kingdom, £1 each per annum; but IT IS QUITE CLEAR THAT THIS REDUCTION MUST SOON TAKE PLACE, WHATEVER MEASURES MAY BE ADOPTED, AND WHATEVER PARTY MAY BE IN POWER. And if there might be fewer ministers, the reduced corps would be animated with loftier zeal, and endued with ampler powers of usefulness. Protestant gentlemen, possessed of four-fifths of the soil of Ireland, would not generally leave themselves and their tenants destitute of pastors; and if a small fraction of the English people can raise £300,000 per annum for missions to the heathen, England would not overlook the fair claims of our Protestant fellow subjects.

"Is it not far better, my Lord, that the ministers of the Irish Church should from this day themselves advocate that measure? * * Long has the Church been rendered incapable of efficient action, by the enmity with which State patronage has surrounded it: but should you now organize a missionary system for the whole island, and call your English brethren to your aid, so that the Gospel may be heard in every village,—not only in your churches, to which Catholics will not come, but wherever they may be gathered to listen,—the truths of the Gospel, unchecked in their influence by the bitterness which your possession of hated privileges has hitherto generated among the peasantry, may effect a religious change in Ireland, greater than it has yet experienced. Thus the Church may answer by its disestablishment the very end

for which it was established. For this, too, the grace of God appears to have been preparing you. The separation of the Church from the State fifty years ago would have left your country almost wholly to the priests; but now it would only animate hundreds of excellent men to proclaim Christ with more ardour to all the Catholics of Ireland.

“A century and a half has the cause of truth been losing ground under the influence of penal laws against Catholics, and splendid endowments of Protestants; and the ultimate result of a rich Establishment has been that the proportion of Protestants to Catholics is less at this day than in the reign of Queen Anne: but let the ministers of Christ go forth as Paul did, unclogged by the odium which loads a dominant and privileged minority, and you may see the warm hearts of the Irish welcoming the good news of salvation by grace through faith, without the aid of priests and masses, of saints in the other world, or images in this; and your unprivileged ministry working such moral wonders as bishops’ lands, glebes, and tithes, never could enable it to accomplish.”

That so bold a pamphlet as that of Mr. Noel’s should call forth strong feelings, was to be anticipated; and, accordingly, we are not greatly surprised by the tone exhibited in a review of it, which has been republished from the “Irish Monthly Magazine for September 1845,” in which it is vehemently denounced as “Mr. Noel’s very mischievous letter,” and “this ungenerous publication,” but in which the reasoning of Mr. Noel is very feebly met. There is a poor ebullition of temper at the very outset, in which the author tries to be very smart, and succeeds only in showing that he is very sore:—

“Before we proceed to review the interior of this book, we have one observation to offer on its title page. The author gives his name as Baptist W. Noel, M.A. The Rev. Baptist Noel is well known to the religious public. Is this he? It is usual for clergymen, when they write books, and put their names to them, to prefix their title. One would suppose there was an additional reason for so doing, when they write on a subject connected with the Church. Was it because this pamphlet is directed *against* the Church, that Mr. Baptist Noel’s modesty led him to conceal the fact of his being one of her own ministers? Or has he taken a more honest part, and resigned his office ere he took up his pen to write evil and poisonous words against her whom he had sworn to reverence and support?

“But, perhaps, this is another Baptist Noel. We would gladly hope so; for we thought better of him than we can of the writer of this letter.”

The argument of Mr. Noel is then, with large display of logical precision, set forth and dealt with. We can afford room only for a question and a paragraph. The question is:

“* * * Does Mr. Baptist Noel seriously suppose, that because Popery, which he has represented as irrevocably bad, demands of the Government to *deprive Protestantism of its armour*, in order that the truth

may be laid naked for its attacks, it becomes an English clergyman to call upon the English people, for the sake of peace, to deprive the Protestants of Ireland of the means of grace which they possess?" * *

And the paragraph :—

" Were Mr. Noel's premises unexceptionable, his conclusion would find an argument against it in the strong arm of the Protestants of Ireland, and in the bold assertion of their rights. He has failed to prove to the Protestant fathers of Ireland that their children ought to be deprived of the gospel blessings which they themselves possessed, or that they should yield them without a struggle to preserve them for their little ones. It is very well for this Englishman,—who, to judge from his pamphlet, knows just as much about the real character of the parties in Ireland as about the parties in the moon,—to say that the noise of the Irish agitators, which sounds unpleasant in the ears of this comfortable parson, and disturbs his peace of mind, must be silenced by throwing to them, as a sop, the rightful possessions of the peaceful Protestants; *but perhaps he will yet learn, that though they are peaceful, and patient, and enduring, they have inherited from their fathers hard hands, and stout hearts, and unflinching resolution, which may, if forced into action, ere long raise about his ears a louder and more unpleasant noise from Ireland than has yet distressed him.*"—Pp. 7, 8.

Our readers will observe, on the one hand, the tenacity with which, according to the above extract, the endowments of the Irish Church are to be clung to, as "the armour of Protestantism," and on the other hand, the readiness with which violence is to be resorted to for defending them. We doubt if any speech of O'Connell's ever breathed out fire and fury, or threatened the Orange faction with the vengeance of his "seven millions," so plainly as the paragraph which we have printed in italics hints at "hard hands and stout hearts forced into action," in a Church war. Alas for Ireland! that an appeal to the ultimate arguments of mere force should be the ever ready resort of all parties among her sons, and whether Repeal is to be won, or Church property is to be kept sacred, we should hear always of the noise of battle, as the menace that is to carry every thing! After this, with what grace does the writer complain of Mr. Noel's description, as applied to the "noisy" class of the advocates for Protestant ascendancy!—as in the following passage:

"He (Mr. Noel) next proceeds to *justify* this conduct of the agitators. But first he seeks to disarm objectors :—

'Red-hot, sulphur-breath'd ascendancy men, like those mentioned by Burke, who would have become Papists in order to oppress Protestants, if, being Protestants, it was not in their power to oppress Papists, may indeed contemplate the subjugation of the Catholic party by the bayonet, as the just punishment of helots who dare to threaten the prerogatives of their masters; but you, my lord, have no such feelings.'—P. 3.

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“A more objectionable passage than this could not by possibility have been written. It affixes at once upon the Protestants of Ireland, who claim protection from Parliament against the designs of the agitators, the stigma of being ‘red-hot, sulphur-breath’d ascendancy men.’ Now we respectfully reply to Mr. Noel, that he could not have given a more false representation of their character—they are, and they have proved themselves to be patient and peaceful men, who ask for nothing more than protection and a preservation of their rights and property. But he may say he did not mean *them*. Who, then, did he mean, contrasting them, as he does, with the Repeal party? Though, no doubt, he wrote in ignorance, and did not intentionally falsify the Protestant party, ignorance on such a subject in one who writes, and knows that thousands will be guided by his pen, is something worse than wilful misrepresentation. But it is because the Irish Protestants are not what he represents them, it is because they have been too patient and too silent, that Mr. Noel has the power to speak of them as he does. He has learned their character from the speeches of the Conciliation Hall; and he adds the weight of his name to support the slanderous accusations which weekly emanate from that place. Let the Protestants of Ireland remember this, and give the English an opportunity of henceforth knowing them from their own lips and actions.”—Pp. 9, 10.

We humbly think this “too patient and too silent” Protestant has given us “an opportunity from his own lips,” of knowing what manner of spirit he, at least, is possessed of.

The cry of spoliation is, of course, raised, and the assertion that Church property is beyond the rightful control of Parliament, repeated and insisted on, with all the strenuousness of an old defender of the divine right of tithes, but with scarcely so good a case to maintain, as when the Church claimed tithes as her own, *jure divino*, independently, alike, of national authority and of private gift. It is the latter plea only that is now urged:

“He (Mr. Noel) proceeds to paint the horrors that must arise from the struggle, and concludes by saying:—

“That ‘no one can reflect upon the loss of life which such fratricidal struggles would occasion, without feeling that there is no sacrifice consistent with religion and morality which Great Britain should refuse to make, in order to avert such a catastrophe.’—P. 2.

“True; but it is *not* consistent with religion to sacrifice the establishment, nor with morality, for *Great Britain* to take their rightful property from the *Irish Protestants*. It is one of the commandments in the *Moral Law* that says, ‘*Thou shalt not steal*.’ He says the ‘people are inspired by religious enthusiasm, and many of them goaded by want.’ Is it to supply their wants that he intends to employ the property of the Church? Is there no other fund that could be employed in charity than this? or are the English to pick *our* pockets that *they* may have the credit of feeding the hungry? Or is it to gratify the religious enthusiasm of the Romanist, that Mr. Bap-

tist Noel would sacrifice the Church? Truly this would be a worthy motive coming from such a quarter!"

And again :

"We shall now proceed to notice some further misstatements of a very gross nature contained in this pamphlet.

'Still the Church of the minority, established by law, is maintained under an armed compulsion by the toil of Catholics.'—P. 10.

"This assertion is altogether untrue. It is untrue that the Church is maintained 'by the toil of Catholics' (Romanists). * * The clergy are not paid by any man's toil. In truth they never were. When their income was derived from tithes it was an injustice to none, for they had a possessory right over this property as an inheritance descending to them from times immemorial, long previous to the date from which any landlord or tenant could trace his tenure of the soil. Properties were purchased, and leases were made with this reservation. And if the people at any time desired to retain the tithes in their own pockets, this was nothing more or less than 'coveting their neighbour's goods,' or if they did retain it, it was 'stealing them.' * * * The Church is now maintained by a *rent-charge* upon the land, a distinct possession, which neither prevents improvement nor burdens any one. The landlord, be he Protestant or Romanist, will not be so dishonest as to desire to lay hold on property which never, in any form, belonged to him, nor will he feel that his conscience is polluted by being made the instrument of handing his rightful possession to a quiet clergyman, especially when he remembers that he is paid twenty-five per cent. for the trouble. * *

"Having stated the gross income of the Irish Church as amounting to about £550,000; and that out of this sum 1638 archbishops, bishops, dignitaries, and incumbents, are supported; he proceeds to an assertion which shows complete ignorance of the history of the Irish Church. * * * The false statement to which we allude is as follows:—

'This body of clergymen is maintained by tithes and glebe, or other church lands, which have been transferred by the State from Catholics to Protestants, and which, if it should at any time be found that their application to the maintenance of Protestant ministers was detrimental to the progress of religion, might be sold, at the death of those possessing life interests in them, for objects of general utility both to Catholics and Protestants. This property is, therefore, national property.'—P. 37.

"This doctrine is not now stated for the first time, although it sounds new as coming from the pen of a clergyman of the Church. It has been frequently contradicted and disproved; we shall not here enter into the controversy, further than to state a few *undisputed* historical facts, which we would advise Mr. Noel to keep before his mind when next he takes up his pen against the Church. The Church previous to the Reformation, possessed large property, not the 'endowment' of the State, but accumulated from time to time from the benefactions of individuals. It was, therefore, no further 'national property,' than

any man's estate, which is in a certain sense 'national,' and subject to the omnipotence of Parliament. At the time of the Reformation this property was not 'transferred by the State from Catholics to Protestants.' But the people, *and all the clergy, with scarcely a single exception in Ireland*, throwing off the usurped authority of Rome, and popish error, retained, as an old and inalienable right, the property which being theirs before they had reformed themselves, continued theirs after this reformation. * * It ought not to be lost sight of, that the State *never bestowed any property* upon the Church, though it has been ready enough at all times to strip it of its lawful inheritance. * * At the Reformation, the Church, and the Church property together, were separated from Rome by the will of the majority of the people." * *

Our readers may be sure we are not about to inflict on them a new discussion of the vexed question of Church property. Whatever obsolete dreams may still haunt the minds of Churchmen, statesmen of all shades of opinion are pretty much agreed in maintaining that, at the very least, there is some considerable difference between property belonging to individuals, and that which is in the hands of great public corporations, such as, in reference to this matter, the established Churches must be held to be; and that there is a corresponding difference in the measure of control which the State has over these two kinds of property respectively. Even property bequeathed to an individual is not exempt from the disposal of the supreme power of the State, in certain extreme cases, in which there may seem to be a necessity for interfering with the testator's will: and the more the bequest assumes the character of a public trust, the more clearly and unequivocally does it become subject to the discretion of the entire community and their rulers. The existence of this discretion is allowed by this writer; and its exercise is pleaded, (strangely enough, in bar of a repeated exercise of it now,) in the instance of the Reformation. But if the general body of the people could then alter the destination of property alleged to be bequeathed by private parties—for assuredly its destination was then changed, and it was made to belong to parties, and to be applied to purposes, very far indeed from the mind or intention of the original donors—if their wills, alleged to be executed generations before, could be then changed or set aside by the national will of the day—what stands equitably in the way of a still farther modification of these wills now? And if it be said that what may now be proposed, in the way of appropriating the Church revenues to other national objects, may imply a more sweeping alteration of the purposes of the testators, than what was then done, when they were merely transferred to the support of another mode of faith and worship—it is to be remembered, in the first place, that this does not touch the question of the right which the nation has

to interfere with the destination of funds thus left in public trust ; and, secondly, that for anything that now appears, the pious founders of these said endowments, if they could be consulted on the subject, would all along have preferred, and now, more than ever, in the altered circumstances of the country, and with the rising prospects of Rome, would prefer, the allocation of their legacies for general purposes of utility, to what they might indignantly resent as a flagrant perversion of them, for the support of heresy and schism. For surely they left them as resources that they meant to make available for the permanent maintenance of Orthodox and Catholic truth, which, the more the people wished to change it for Protestant error, so much the more needed all the support which their benefactions were designed to give.

But it has always occurred to us that there is another answer to the plea set up in behalf of Church property, on the ground of its having been bequeathed by private parties, and not given by the State.

Granting this, and admitting, moreover, that in so far as a private bequest, even for public purposes, can be instructed to have been made to individuals, or to a corporation, it ought to be exempted from the disposal of Government and of the community—one thing, at least, is clear, that it rests with Government and the community alone to say, whether there shall be an Established Church at all, or not, in the land—whether the alliance between the State and any particular form of Christianity shall be kept up or dissolved. Let us suppose the country to be of opinion that there should be no Established Church in Ireland—no Church which the State, as such, should prefer to other communions, and invest with the character of a Church “by law established ;”—let an Act of Parliament be passed, not touching endowments, or commuted tithes, or property of any kind, but simply to the effect that it is no longer expedient for the State to be in alliance with one Church more than with another ; or, in other words, that the Protestant Episcopal Church shall cease to be the State Church, without any other body being substituted in its place, and without any thing being said as to its property. Then, let that Church plead legacies and bequests of private parties, as far as these will avail : for then the question would be fairly raised.

For, surely, whatever these old donors or testators could do with their property, in the way of leaving it to one particular Church and not to another, they never could bind the State to maintain in perpetuity an alliance with that, or with any Church. Private parties might themselves *endow* a Church ; they never could bind the State to *establish* it.

We are aware that to some this may seem to be a distinction

without a difference, while others may regard it as a mere *reductio ad absurdum* by which the adversary is run up into a corner. Such persons may accuse us of a sort of quirk or quibble, and may tell us that the very reasoning we are combating is against the disestablishing of the Irish Church, on the express ground that such a course would imply the loss of its endowments. But be it so; that is no concern of ours in this argument. We are meeting the assertion that the vested right which that Church has in its temporalities is a bar to the State's dealing with the question of its continuance in the position of an established Church, and in the relation to the State which that position implies; and we say, whoever may have given the Church these temporalities, and by whatever charter of irrevocable or inalienable bequest, no private party could bind the State to maintain an alliance with the Church, for the mere purpose of securing to it the possession of these alleged benefactions. There being an established Church in a country, an individual may leave money to it, under that style and character; but it would be rather too much to admit that he thereby forecloses the question—whether there shall be an establishment in that country or not—for all time coming. If the State in its discretion decide that there shall be no established Church any longer, the private elegacy must take its chance; and if there be then no body entitled under the original deed or will to claim it, we presume it must revert to the crown as *ultima hæres*, and be treated as a part of the national wealth.

Holding it, therefore, to be in equity a perfectly open question, in what manner the State ought to deal with ecclesiastical prerogatives and ecclesiastical privileges in Ireland, we have three distinct proposals before us: the first, to continue to the Irish Church its civil privileges and temporal possessions, and conciliate the Roman Catholics by a liberal sop to their priesthood; the second, to give up the attempt to maintain a religious establishment in Ireland, on the ground of expediency and equity, and to avert the worse evil of an endowment of Romanism; and the third, to keep things as they are, in respect of Anglican ascendancy and papal voluntaryism. There is yet a fourth—to transfer or divide the spoil—so that the Roman Catholic clergy may share the wealth of the Irish Church. But whatever a few years of agitation may do towards reconciling men to some such compromise between the extreme views of opposite parties, it is not at present a measure of much practical value or plausibility.

We have not space, in this article, to examine these several prescriptions minutely; nor was this our object in bringing them forward. Our anxiety rather is to make it palpable, and to proclaim it openly, in the first place, that the question of re-

ligious establishments is now fairly raised, not as regards Ireland only,—for we at once allow that the settlement of it must embrace the whole empire, since we have no idea of its being possible, as Mr. Noel seems to think, to confine it to Ireland,—and, secondly, that this question of religious establishments is now practically raised, in very different circumstances indeed, and on a very different footing, from those which marked the recent keen discussion of it within the last few years. When it arose, some short time ago, it was canvassed very much as a polemical controversy in theology: the abstract lawfulness of Establishments was the topic generally agitated; and the duty of nations and communities, in reference to religion, and the countenance to be given to it, formed the thread of not a little subtle and intricate argumentation. At that time, also, it seemed as if the defence of establishments had the advantage of many tendencies in all the existing Churches towards improvement and revival; so at least many of their defenders believed: in Scotland, the work of reform and of extension was going on; in England, evangelical piety seemed to be on the increase; and even in Ireland, when the Appropriation Clause was so strenuously resisted by a large portion of the religious public, it was under the impression that the Irish clergy were becoming really missionaries, and certainly without the least suspicion that the party whom their aid then enabled to defeat that measure, in opposition, would immediately on their return to power, exact, as the price of the preserved integrity of the Church's wealth, the endowment of Romanism out of the public funds. Now, all these things are changed. Not to speak of what has happened in Scotland to make even politicians of influence and ability less confident of the good working of the existing establishment than before,—is it not a deepening impression in the minds of all serious thinkers, that the resources of the English Church are now more and more aiding in the propagation of error instead of truth? And in regard to Ireland, what fair promises in the Episcopal Establishment have been blighted? and who would purchase the small infinitesimal portion of its endowments that actually goes to the support of a zealous and pure Christianity, at the cost of a large grant to the priests of Rome? Meanwhile, religious men and religious communities are forced, more and more, into positions of independence: and there is evidently rising a spirit which all the sordid policy of such shrewd judges of "human nature" as our Quarterly Reviewer, with Sydney Smith to back him, will not purchase or tame. We cannot but think that, in this crisis, a breathing time is allowed, if men would learn wisdom, ere the inevitable crash comes. Why should it alarm us, or seem formidable and re-

volutionary, to avow that the time has come, when it is a fair question whether the least of two evils may not be, the giving up of existing endowments? We must not enter into the question farther at present; but we cannot close without expressing our conviction, that if it were grappled with, in this time of peace, by statesmen and churchmen, seeking only a wise practical adjustment, it might be found to have much less of real connexion with the support of good government and sound religion, than many looking at it from a distance might suppose. That the nation and its rulers are bound to honour Christ, and maintain his cause, is a doctrine which even those of its advocates who had quitted an Establishment for conscience sake, may maintain with as much tenacity and strength of conviction as ever; but they may hold, at the same time, that the nation and its rulers would, on the whole, best discharge this duty, in present circumstances, by having no established Churches, in the common sense of that phrase at all. And as to the views of statesmen and politicians, it might be not unwise for them to consider, whether it may not be safer and better to have all the Churches of Christ unestablished alike, rather than to have the present plans of endowment made the instrument of corrupting the more pliant among them, and irritating justly the more conscientious and sincere.

THE
NORTH BRITISH REVIEW.

FEBRUARY, 1846.

ART. I.—*Physical Description of New South Wales and Van Diemen's Land, accompanied by a Geological Map, and Diagrams and Figures of the Organic Remains.* By P. E. de STRZELECKI. 1 vol. London: 1845.

Journals of Expeditions of Discovery into Central Australia, and overland from Adelaide to King George's Sound, in the year 1840-1, sent by the Colonists of South Australia, with the sanction and support of the Government, including an Account of the Manners and Customs of the Aborigines, and the state of their relations with Europeans. By E. J. EYRE, Resident-Magistrate, Murray River. 2 vols. London: 1845.

WHEN time has ripened history, and the relative importance of historical events is valued by their results, no event, perhaps, of the seventeenth century, will be deemed so important as the landing of the first English Colonists on the American Continent, in the year 1610; and few of the eighteenth more important, than the settlement of the first colony in the other new world of Australia in 1788. England, during the last two centuries, has been sowing the seeds of mighty empires in America, Africa, India, and Australia; and in Europe her language, literature, manners, her principles of government, her ideas of the civil and religious rights of men in social union, have been making conquest of public mind and opinion in every country. England might exult in her glory, but for the reflection that, in all physical and intellectual existence, this maturity, this ripening and shedding of the seed, is but the prelude to the withering of the leaf, and the decay of the parent stem.

In the half century which has elapsed since Lieutenant-Colonel Collins unfurled the British flag on the shore of Sydney Cove,

and, as Governor, took formal possession of the island-continent, the progress of this embryo empire of the southern hemisphere has not been so rapid, nor by such sound, well-grounded footsteps, as the progress of our old American colonies was, in the corresponding period of their establishment. Already, in 1670, we find it stated by Sir Josiah Child, in his *Discourses on Trade*, that "our American plantations employ near two-thirds of all our English shipping, and thereby give constant sustenance, it may be, to 200,000 persons here at home." Barbadoes, the oldest, and then the most flourishing of our West India possessions, and Jamaica, conquered from the Spaniards in 1655, are probably included in this statement, among "our American plantations;" and our slave trade, which in 1680 was reckoned to take 300,000 slaves annually from the African coast, among the employments of our shipping, and the sustenance of our population ascribed to them. There were causes, however, both physical and social, why the development of our early American colonies was more rapid, healthy, and sound, than that of our colonies in Australia.

Our American colonies had the advantage of possessing various secondary staple products, such as tar, pitch, turpentine, potashes, spars, staves, which a wooded country, in the process of being cleared and made arable, yields to the industry of the first settlers. These rude articles, requiring no skill or capital, but simply labour to produce them, are in fact, necessities of life, without which the movement of civilized society could scarcely go on, and which the old cultivated countries of Europe could not produce in sufficient abundance. Australia has no such minor staple articles, and no cheaply accessible markets for their sale, even if she could produce them. The isolated settler there cannot, as in America, produce with his axe, and the labour of his family, something of value, of small value indeed, but saleable or exchangeable, and thus apply his time profitably while his crops are growing, or the weather interrupts field-work. He has no secondary product to turn to at home with his family, and his spare days and hours are lost, or non-productive, compared to the settler's in America. Australia, wanting those minor staple products, wants also one main element of social prosperity, the middle class between the producers and the exporters of those products, the class of dealers who, as store-keepers in every village, (often the first inhabitants, and even the founders of the forest-village,) or as travelling merchants going from settler to settler, buy up or barter for the smallest quantities of those products, and carry trade and civilization into the depths of the back woods. The most ignorant of the working class of emigrants can appreciate the advantage of having a secondary branch

of industry on his own land besides the crops, buyers at his door to give something for the product, and, in the class of dealers, a visible step in the social scale, which is above his own, but is quite within his reach to attain for himself or his children. The tide of migration, therefore, from Europe, always sets most strongly towards the American shores. America had also, from the first, a staple article in tobacco, for the more wealthy class of emigrants, one requiring and remunerating the outlay of capital, and which other countries consume, and cannot produce of the same quality. As early as 1618, it was an article of export, and in 1620, warehouses were established in Holland, at Middleburg and Flushing, for the receiving and assorting of American tobacco. Rice was not extensively cultivated in the southern settlements until the eighteenth century. It is supposed that rice was first introduced into Carolina about 1702. The culture of silk was fruitlessly attempted in Georgia before the introduction of cotton. Tobacco, rice, and cotton, are now the great staple products on which much of the wealth and prosperity of the American empire is founded. Australia has not the physical advantage of producing any one staple article peculiar to her climates, soils, or mineral products. As a seat for colonies, she is the poorest of countries, in natural sources of wealth. Our colonies in Australia labour, also, under a social disadvantage from which our American colonies were exempt. In 1610, and for almost a century and a-half after that date, female work was, in all civilized society as then existing, almost as valuable as the work of men. The clothing material, linen and woollen, of all the labouring population, and even high up in the middle class, was produced by household industry, in that stage of the progress of society. In every family the females were constantly occupied in spinning, knitting, often in weaving, in bleaching, fulling, dyeing, or in preparing the raw material, produced at home, for those operations. Money was saved, or even gained by this family manufacturing. The wives and daughters of the pilgrim-fathers in America, could earn by the spinning-wheel and loom, something for the family support, or save some outlay, as well as their husbands and brothers. The female half of the emigrant body were not an unproductive half in respect of the value of their labour, which they now are. In the progress of society, capital, skill, and machinery in factory-industry, have entirely extinguished this family-industry. The world is supplied with much cheaper and better clothing-material than the housewife and her daughters could spin and weave; and the use of finer stuff has refined the general taste, so that the rude, coarse clothing material of domestic manufacture, in a former state of society, is rejected by all. England was ripe for this change, from

family to factory production. The change was gradual. The time and labour employed in producing inferior clothing material by household industry, was gradually absorbed by other employments, and reinvested in new occupations. But there are classes, positions, and countries, in which no reinvestment can be found for this time and labour of the female population. Their industrial resources are not sufficiently developed and ramified. They are not ripe for this change. France and Germany perhaps, with their vast population of small, poor, working landholders, are not in a social position sufficiently advanced, to admit of the home industry of the female population being superseded by the cheaper and better fabrics of a comparatively small body of manufacturers, collected, with their capital, skill, and machinery, in a few localities. The wants of the population, their tastes, habits, and the occupations for supplying those tastes, wants, and habits, are not sufficient to absorb the time and labour so suddenly disengaged from household industry. Those countries are doing, by encouragement from their Governments, in one generation, in five-and-twenty or thirty years, what in England was only accomplished by the natural progress of society in five generations, or in a century and a half. The moral and social effects in France and Germany of this precocious change, are evidently evil. The time and labour saved by the application of capital, skill, and machinery, is not a gain but a loss, if there be nothing to which the saved time and labour can be applied. It is a saving to idleness and its moral and social evils, not to industry and its fruits. From the social state of the parent country in the seventeenth century, the female half of the emigrants from it to America were productively employed, and had the skill and acquired operative dexterity, and use of implements, to be so, as well as the males in the colony. In the nineteenth century, the social state is so changed, that the parent country sends out, in a body of 1000 emigrants, only one-half, only 500, whose labour is really productive, and of value to the colony; and that half has to support the non-productive half. Cooking, washing, bed-making, and house-cleaning, are needful, but not gainful occupations; and modern colonies in which these are almost the only occupations in which one-half of the population are engaged, cannot advance so rapidly as the more ancient, in which all were, by the application of their time, labour, and skill, employed in giving a value to the raw material of the colony, and earning their own subsistence by productive industry. These physical and social causes may account, in part, for the much slower progress of our Australian, than of our old American colonies in the same space of time;—but we shall return to the economical state of those colonies, when we have given some ac-

count of M. de Strzelecki's physical description of New South Wales and Van Diemen's Land.

M. de Strzelecki, a nobleman of Prussian Poland, we believe, is one of those rarely gifted travellers, who unites to a competent knowledge of the physical sciences, great power of observation, clear and distinct views, and indefatigable perseverance. He is a worthy follower in the career of Leopold von Buch, and von Humboldt. M. de Strzelecki has occupied twelve years in travels, and voyages round the globe, exploring "North and South America, part of the West Indies, the South Sea Islands, New Zealand, New South Wales, Van Diemen's Land, the Javanese Islands, part of China and the East Indies, and Egypt." This *Physical Description of New South Wales and Van Diemen's Land*, comprehends the fruits of five years of continual labour and observation, during a tour of 7000 miles on foot. It is a work of science, not a book of travels. M. de Strzelecki gives us the results of his researches, not the narrative of incidents and casual observations occurring to him; and from the value of the few notes in which these are occasionally given, we regret that the traveller had not adopted the less rigidly scientific, but much more instructive and agreeable form of a personal narrative of his travels. The work is divided into eight sections. The first section gives a clear and distinct account of the marine and land surveys of the country; the second gives the traveller's observations on terrestrial magnetism; the third treats of the mineralogy and geology of New South Wales and Van Diemen's Land; the fourth, fifth, and sixth, of the climatology, the fossil and the existing flora, and the fossil and the existing fauna, of those countries. The subjects of these sections do not admit of abridgment or extract; for the research and study of years in the sciences connected with them, may be contained in the columns of a table, or in a coloured map, or diagram. The geologist and naturalist would not be satisfied without the whole; and to the ordinary reader the whole would be tedious, and the abridgment would be unintelligible. We hasten, therefore, to the seventh and eighth sections, which are by far the most interesting and valuable to the unscientific world. The seventh section treats of the aborigines; the eighth, of the colonists—of the economy, the soil, sheep-farming, tillage, and improvements of the two colonies, New South Wales, and Van Diemen's Land. Both sections are full of such new information and reflections, that we regret they form so small a portion of M. de Strzelecki's work.

Mr. Eyre, after the narrative of a long and disastrous expedition by land, in 1840-1, from Adelaide, in the south-east, to King George's Sound, or Swan River district, in the south-west, during which he was, for more than a year, in the wild waste

with the natives, gives, in his second volume, a very interesting account of their social condition, their manners and customs, and of the evils and benefits to them, produced by our colonization of their country. Mr. Eyre has been, since his return in 1841, and is at present, the resident stipendiary magistrate at Moorunda, on the Murray River; and, in the course of his official duty, is in frequent intercourse with the aborigines, travels among them, visits the various tribes who come within his district, hears and settles their disputes with each other, or with the colonists, and has a personal influence among them greater than any European ever acquired before. He is also in a position both to acquire more information, and to observe more impartially, than the colonists, whose opinions are often clouded by the prejudices of their ignorant white servants; who, with the ferocity of convicts out of sight of control, inflict injuries on the natives, which they excuse by exaggerating their savage and brutal nature. Mr. Eyre's account of them, which nearly fills his second volume, is highly interesting and important; and impresses the reader with the conviction that it is a dispassionate, faithful representation, by a man free from prejudices for or against the native race, and of more than ordinary powers, as well as opportunities of observation.

The aborigines of Australia, in the opinion of Count Strzelecki, which is confirmed by Mr. Eyre's observations, are not physically different in structure, strength, form of skull, or of osteological frame, from any other race of uncivilized men finding their subsistence from the natural products of their country by the exertion of the natural powers and faculties required to obtain it. M. de Strzelecki makes the just observation, that hitherto, in physical geography, races of men have been determined as different by the characteristics which their external organization presents; but the instinctive and mental faculties peculiar to each race, and in perfect accordance with the local circumstances in which that race is placed, furnish the true principles of a classification. It is the continual exercise, in fact, of these instinctive and mental faculties, which develops or modifies the external organs differently under different circumstances. The Australian natives are of quick perception, and retentive memory, seeing, and imitating readily, the slightest peculiarity in individuals; and, like all wandering savages, endowed with great acuteness of the senses, and great powers of recognition of what they have seen, or heard of, before. They are thoughtless, good-natured, fond of their children—although, from pride, policy, or probably from unrestrained polygamy, and the servitude of their wives, they express no affection for the mothers; but, after a long absence, will sit down, and act, and look, as if they had never been out of the encampment. In this custom, and in the ceremonial of visits,

and of hospitality, there is a great similarity with the customs of the North American Indians, as described by Catlin. Under similar circumstances, similar customs exhibit themselves among mankind, although it is impossible to trace the natural connexion between the custom and the circumstance, or tell why the latter should produce the former.

"It is a mistaken idea, as well as an unjust one," says Mr. Eyre, "that supposes the natives to be without sensibility of feeling. Upon meeting children after a long absence, I have seen parents fall upon their necks, and weep bitterly. The following is a case in point: A fine, intelligent young boy was, by his father's consent, living with me at the Murray river for many weeks, but upon the old man's going into Adelaide, he took his son away to accompany him. Whilst there, the boy died, and for nearly a year I never saw any thing more of the father, although he had been occasionally within a few miles of my neighbourhood. One day, however, I was out shooting about three miles from home, and accidentally fell in with him. Upon seeing me, he immediately burst into tears, and was unable to speak. It was the first time he had met me since his son's death, and my presence forcibly reminded him of his loss. The same circumstance occurred when he accompanied me to the house, where every thing he saw recalled the memory of his child."

Mr. Eyre gives them credit for some delicacy of feeling and innate propriety of behaviour, which lead them to avoid what may be rude or offensive to others, and mentions an instance of a native dance at which they were, as usual, in a state of complete nudity. One of the natives saw a white woman at a little distance approaching, and they all, with one accord, crossed over to the bushes where their cloaks were, put them on, and resumed their amusement. They are considered by the colonists a cowardly race; but as far as they can show courage among themselves, against men upon an equality in respect of weapons, they are considered, by Mr. Eyre, equal to other men. They have not the fire-arms, nor the ferocity of the emancipated convict; but in the better part of courage—calmness, endurance, self-possession, and resources in circumstances of danger—they are unequalled by the white race settled in their country. They meet and surmount the dangers peculiar to their local circumstances. The wars between tribes are not bloody. It rarely happens that more than one or two are killed, though hundreds may have been engaged. Fights are sometimes witnessed by men who are not concerned in them, and by the women and children. Males are obliged always to take part with their own tribe and relatives; but women and children are never butchered after a battle. They are not a blood-thirsty race. Revenge for injuries, such as the murder of a friend or relative, is only to be

appeased by blood, as among all uncivilized nations; but the Australian nations have made one step towards civilization, which places them in advance, by many ages, of the New Zealanders or the North American Indians. The injuries, whether in the case of individuals or of tribes, for which blood is demanded, are expiated by a shedding of blood not involving the loss of life. The perpetrators of the injury, after much ceremony and talking, present their left shoulder, and the injured party pierces with a spear the left arm, a little below the shoulder, and thus the injury is expiated, the honour of the injured vindicated, and his revenge appeased. This custom, or rude approach to a legal or customary restraint upon the savage instinct of revenge, is very remarkable. When we look at the customs, languages, arts, and implements of the inhabitants of the southern hemisphere, we may almost doubt whether all that we see be not rather the debris and remnants of a once much higher state of civilization, than the gradual advances of the natives from a lower to a higher and higher condition of humanity. The aborigines of Australia, if classed according to their mental powers and capability of civilization, would probably stand next to the New Zealanders and Sandwich Islanders, and above the natives of Otaheitee. They seem to want the energy of character of the two former races, and the licentiousness, and softness, the corruption before civilization, of the latter. The food of the aborigines is not to be obtained in the same districts at all seasons. The scarcity of water, also, renders some tracts of country uninhabitable at certain seasons. The nomade life and its evil—its influence in the steppes of Asia, as in the Llanos, or Pampas of South America, to arrest the progress of civilization by the sameness and paucity of the objects in the pastoral or wandering life, for human intelligence and industry to act upon—is by nature imposed upon the natives of Australia; and in comparing them with populations in the southern hemisphere, apparently more advanced in civilization or intellectual power, this element of barbarism should be taken into account. They have no houses, huts, or wigwams, for permanent dwellings, because there is no permanent supply of food in any one locality. They must wander for subsistence to tracts often very distant from each other, at different seasons. But they are not without food, even in abundant supply. In some of the many books on Australia which the press pours forth every year, the natives are described as a wretched starving race, below the ordinary standard of humanity in habits and intellect, and supporting a miserable existence by eating lizards, disgusting maggots bred in the trees, serpents and grubs. We devour crabs, lobsters, oysters, without being horror-struck at their resemblance to huge spiders, boiled scorpions, or raw

worms. Among our five senses, taste seems to be specially made a fool of by sight. Captain Grey, in his travels on the west coast of Australia, says, "generally speaking, the natives live well. In some districts there may, at particular seasons of the year, be a deficiency of food; but if such be the case, those tracts are, for the time, deserted." A traveller, he says, or even a strange native may, in some latitudes, starve if he has no one to point out to him the vegetable productions fit for food with which the soil beneath his feet is teeming. "The same rule holds good," he adds, "with regard to animal productions; for example, the shrub, or tree xanthornia, in the southern parts of the continent, affords an inexhaustible supply of fragrant grubs, which an epicure would delight in when once he had so far overcome his prejudices as to taste them." Mr. Eyre gives a list of the edible articles used by the natives, viz., salt water and fresh water fish and shell-fish, and the rivers abound in large fish, fresh water turtle, frogs, rats, mice, lizards, most kinds of snakes and reptiles, grubs, moths, white ants, larvæ of insects, birds' eggs, kangaroos, opossums, squirrels, sloths, wallabies, wild dogs, wombats, ducks, geese, wild turkey, swan, pelican, pheasant, and other animals; besides a great variety of roots and vegetable productions. "Of these articles," Mr. Eyre says, "many are not only procurable in abundance, but in such vast quantities at the proper season, as to afford, for a considerable length of time, an ample means of subsistence to many hundreds of natives congregated in one place."

If cannibalism be known among some tribes—which is not well authenticated—it is resorted to not from want of food, but from the belief in a sorcery by which supernatural powers are to be acquired by tasting human flesh, or to be communicated to spears smeared with the fat of a human body; and the bodies so applied are those of persons who have died from wounds or disease. The nets and implements for catching their food, the sagacity and perceptive powers in discovering, and perseverance and forethought in reaching in due time the districts in which their food can be found for a season, their weapons, baskets, canoes, show no want of intellect and ingenuity.

The government of this people seems to be entirely patriarchal. The father in the family, the elders in the tribe, appear to have authority; but no chief of a tribe, or king over several tribes, is acknowledged. Their affairs are managed by conferences at meetings of tribes. These meetings are frequent, because, by a singular social institution common to all the Australian tribes, although using dialects unintelligible to each other, and separated by great distances, and by differences of climate and means of subsistence, there are, between boyhood and middle age, five

steps or grades each with its peculiar restrictions on the kinds of food to be used by the men belonging to it. In advancing from one grade to another, a considerable ceremonial meeting is held, and on conferring the highest grade, tribes are assembled from a distance of seventy miles round; and M. de Strzelecki was told it would be dangerous to approach within ten miles of the meeting place. In this singular social institution—upheld by no civil or religious authority, but merely as traditional custom—may probably be traced the rudiments of some social arrangements like the divisions into castes using different food, of the population of India. The Australian tribes appear to have had a common origin and language; although the dialects of neighbouring tribes are, in some cases, unintelligible to each other, and they can only communicate together by a third dialect understood by both. This greater coincidence in language between tribes widely separated from each other, as on the opposite sides of the Continent, than between tribes now living near to each other, is ingeniously accounted for by Mr. Eyre, by supposing the country to have been peopled originally by one race in two divisions, which followed the opposite coasts, and that, subsequently, a third division of the same race has come in by a third route, in the centre of the country, between the two, and brought with it some difference in dialect and customs. It seems to be the opinion of the missionaries, Messieurs Schurman, Meyer, Teichelman, and others, who have paid much attention to these dialects, that notwithstanding the great differences in words, and even in those least liable to be disused or changed, the similarity, in structure and in other circumstances, outweighs the discordance, and that the dialects now in use have had a common root, and the people, notwithstanding some difference in customs in different districts, have had a common origin.

One of the most revolting and disgraceful sophisms by which private cupidity has successfully deluded the British Government into measures for the interests of a few individuals, under the pretext of a principle of public law and right, sanctioned by reason and religion, is that the native uncivilized inhabitants of a country, the wild aborigines, are not the rightful owners of the land of their nativity, the land which they merely live upon, but do not cultivate; that the foreign colonists, who intrude into, settle on, and cultivate this land, become, *ipso facto*, the legitimate owners, and may expel the aborigines who do not cultivate it, but merely live upon it by hunting, fishing, and gathering the roots, fruits, and spontaneous products of the soil; and may do so justly, by the law of God and man. The natives have no rights of property, according to this sophism, in the soil of their native land, because they do not plough, sow, and reap, and make it available for a

civilized subsistence. On this new principle in the moral code, our encroachments on the natives of New Zealand, the grants by our Government to speculating land-companies on the Exchange of London, of land of which the natives had a distinct appropriation among themselves by tribes, and proprietary rights which no individual of a tribe had a power to alienate—our deportation of all the natives of Van Diemen's Land whom we had not starved or massacred, to Flinders Island in Bass Strait, where the miserable remnant of the people we tore from their native home are perishing from the face of the earth—the American aggressions on, and occupation of, the hunting territories of the Indian tribes, and the French razzias in Africa for the purpose of establishing civilized agricultural colonies in a land now only occupied or overrun by the wandering Arab tribes and their flocks, may all be justified,—all are deeds equally conformable to this law of nature and of nations, that the more civilized may, as matter of right, seize on the land which the less civilized do not use and cultivate. It is reasoned thus; and this reasoning is unblushingly avowed and acted upon by our land speculators who receive, and by our colonial department which grants, allotments of land in Australia and New Zealand. The earth, it is piously observed, was given by its Creator to man to live on, to use and cultivate, so as to produce a civilized subsistence for the human race in the highest moral and Christian state which human nature here on earth can attain; therefore, if a wild uncivilized race of natives in a country merely wander over its surface, living on its spontaneous productions, the wild fruits, game, fish, without cultivating the land, and raising a more abundant and civilized subsistence out of it, they may be justly, legitimately, and on right principle before God and man, driven out, and dispossessed by those who can cultivate the land, and bring it by their industry to the use for which it was intended by the Creator, the abode of civilized Christian men. Now the premises here are right, but the conclusion is wrong. The earth is no doubt given to man for his support, and in a civilized, rather than in a savage state; but are we to conclude from this that we are to despoil, expel, or massacre our fellow-men who are in a savage state, instead of reclaiming, and enlightening, and civilizing them, if we can, and letting them alone if we cannot? The use and cultivation of the land are but relative terms. The savage who merely hunts over it, uses it for his subsistence as well as the farmer who ploughs and sows every foot of it. It is but in the quantity of subsistence derived from a given area of land, that the savage native and the civilized colonist differ as to the use of it; and if the use, the productive use, be the basis of proprietary right, what right would landholders in a civilized country, in England for instance, have to their estates,

if it could be demonstrated that others, for example their tenants, understood and could practise agriculture, or the productive cultivation of land, much better, and therefore had a better right to the property of the land, since they could produce more subsistence for man from it? Civilization itself is but a relative term, and can confer no legitimate right on man in one state, to appropriate to themselves what is not their own, but the neglected property of men in another state. On a jury we would hold it to be no excuse for a thief, that the man whose pocket he had picked was drunk, or blind, or an idiot. Our colonial department not only admits the excuse, but acts upon it. The right of our Government to the land which it has granted in Australia to emigration companies or individual settlers, stands upon no better grounds, socially, morally, or religiously considered, than this sophism affords. The principle and the practice of our colonization in Australia and New Zealand will be the indelible blot on British history in the nineteenth century. It can only be accounted for from the want of a permanent Board or Head for colonial affairs. By the rapid succession of colonial ministers on every political change in the Cabinet, a new man is placed for a year or two in charge of affairs to which the study and experience of a life time are required, and he must of necessity depend on men he has found in permanent subordinate situations in the colonial department, who may be sufficiently faithful, exact in the routine of business, and well informed, but are not responsible for the advice they give, and are in the position which in this country always, and justly, is loaded with the public distrust and dislike, that of secret unseen advisers—not of a public board acting under the eye of the public. It may be doubted if advisers bred in the routine of the Colonial Office are above the views of the petty colonial policy of times of a lower moral standard in national acts, than that which the present generation applies to public men and measures. It would be ridiculous to assert that the public responsible men, the Cabinet Ministers, who, on each change of administration, take the important charge of colonial affairs, are self-acting in their office, judge from their own knowledge, have weighed the information laid before them, deliberately by themselves, colony by colony, case by case, interest by interest, without trusting to the opinion of irresponsible officials under them, who in reality manage the colonial affairs of the empire under their name and responsibility. It would require the lifetime of the oldest, and the abilities of the ablest, of the public men who, in the course of thirty years, have held the department of colonial affairs, to understand, and satisfactorily to their own consciousness of the trust, to manage the complicated interests of our colonial empire; yet there are at pre-

sent four public men living, none of them very aged, Sir George Murray, Lord Glenelg, Lord John Russell, and Lord Stanley, who have held the office of minister of the colonies. With such a brief tenure of office, with the unavoidable ignorance of the peculiar local interests and circumstances of the business in the department to which they have been appointed by chance in the distribution of office, and with the drawbacks on their time and minds, of parliamentary business, party discussions, ministerial meetings, cabinet councils, and white-bait dinners, it would be unjust to throw upon the individual ministers the faults of the system and position in which they are placed. They are not to blame for continuing to act on the system which their predecessors acted upon, and the principles of which they have not had the time to examine, before they are called upon to sanction it by renewed acts. In this way we must account for the unprincipled aggressions on the property of the natives in Australia, permitted under each succeeding minister of colonial affairs, although each individually would have cut off his right hand rather than have given, knowingly and deliberately, his official sanction to such atrocious violations of justice and humanity.

"It has generally been imagined," says Mr. Eyre, "but with great injustice, as well as incorrectness, that the natives have no idea of property in land, or of proprietary rights connected with it. Nothing can be farther from the truth than this assumption, although men of high character and standing, and who are otherwise benevolently inclined towards the natives, have distinctly denied this right, and maintained that the natives were not entitled to have any choice of land reserved for them out of their own possessions, and in their respective districts.

"In the public journals of the colonies, the question has often been discussed, and the same unjust assertion put forth. A single quotation will be sufficient to illustrate the spirit prevailing upon this point. It is from a letter on the subject, published in the *South Australian Register* of 1st August 1840:—'It would be difficult to define what conceivable proprietary rights were ever enjoyed by the miserable savages of South Australia, who never cultivated an inch of the soil, and whose ideas never extended beyond obtaining a sufficiency of white chalk and red ochre wherewith to bedaub their bodies at their filthy corrobories.' Many similar proofs might be given of the general feeling entertained respecting the rights of the aborigines, arising out of their original possession of the soil. It is a feeling, however, that can only have originated in an entire ignorance of the habits, customs, and ideas of this people. As far as my own observation has extended, I have found that particular districts, having a radius, perhaps, of from ten to twenty miles, or, in other cases, varying according to local circumstances, are considered generally as being the property and hunting-grounds of the tribes that frequent them. These districts

are again parcelled out among the individual members of the tribe. Every male has some portion of land, of which he can point out the distinct boundaries. These properties are subdivided by a father among his own sons during his own lifetime, and descend almost in hereditary succession. A man can dispose of, or barter, his land to others; but a female never inherits, nor has primogeniture among the sons any peculiar rights or advantages. Tribes can only come into each other's districts by permission or invitation."

Here are surely well-established proprietary rights, which, in common honesty, ought to have been respected by our Colonial administration. But to Mr. Eyre's testimony we add Captain Grey's, whose travels in Western Australia are well known, and whose subsequent appointment to the high situation of Governor-resident in South Australia is a proof that our Colonial Department reposed the fullest confidence in his opinions and information.

"Landed property does not belong to a tribe, or to several families, but to a single male; and the limits of his property are so accurately defined, that every native knows those of his own land, and can point out the various objects which mark his boundary."

But here is testimony still more minute and satisfactory as to the state of proprietary rights to land among the natives, from Dr. Lang, the Principal of Sydney College, New South Wales, whose situation and character are equally beyond undue bias or prejudice, and whose long personal acquaintance with the state of the natives and colonists makes him more able, perhaps, than any man, to give correct information.

"You ask," he says, "whether the aborigines of the Australian continent trace any idea of property in land?" I beg to answer most decidedly in the affirmative. It is well known that these aborigines in no instance cultivate the soil, but subsist entirely by hunting and fishing, and on wild roots they find in certain localities, especially the common fern, with occasionally a little wild honey; indigenous fruits being exceedingly rare. The whole race is divided into tribes, more or less numerous, and designated from the localities they inhabit; for, although universally a wandering race with respect to places of habitation, their wanderings are circumscribed by certain well-defined limits. In short, every tribe has its own district, the boundaries of which are well known to the natives generally; and within that district all the wild animals are considered as much the property of the tribe inhabiting, or rather ranging, on its whole extent, as the flocks of sheep, and herds of cattle, that have been introduced into the country by adventurous Europeans, are held, by European law and usage, to be the property of their respective owners. In fact, as the country is occupied chiefly for pastoral purposes, the difference between the aboriginal and European ideas of property on the soil is more imaginary than real, the native grass affording subsistence to

the kangaroos of the natives, as well as to the wild cattle of the Europeans, and the only difference, indeed, being that the former are not branded with a particular mark like the latter, and are somewhat wilder and more difficult to catch."

After saying that the intrusion of a stranger of another tribe, on the land of any tribe, is resented, and a cause of war among the natives, just as such an intrusion is punished as a trespass by the European settlers, Dr. Lang goes on to say—

"But particular districts are not merely the property of particular tribes; particular sections, or portions, of those districts are universally recognized by the natives as the property of individual members of these tribes."

It can scarcely be maintained, in the face of such testimony as that of M. De Strzelecki, Mr. Eyre, Captain Grey, and Principal Lang, all disinterested observers, long resident (Mr. Eyre for twelve years) among the natives, that these aborigines have no sense of proprietary rights in land. The right and use, according to their social condition, are evidently as well understood, distinctly appropriated, and exclusively exercised by the natives of Australia, as by the inhabitants of any English village, or of any Highland parish, over a common pasture to which they have an exclusive right. If the natives even had no sense of proprietary rights, we did not thereby acquire an honest right to the property which from ignorance they neglected. The total abandonment, by our successive Colonial administrations at home, of the plain principles of justice and humanity, by sanctioning the occupation of the land of Australia without any claim of conquest, cession, or purchase, and without any provision for the starving tribes turned out of their land and means of subsistence, has, naturally enough, produced in the colonists an equal abandonment of all principles of justice and humanity in their treatment of, and dealings with, the natives. The land was granted by the early governors to their own friends or relatives, without check or stint. The natives were driven from their land, because, as Captain Grey observes—

"Directly an European settles down in the country, his constant residence in one spot soon sends the animals away from it; and although he may in no other way interfere with the native, the mere circumstance of his residing there does the man, on whose land he settles, the injury of depriving him of his ordinary means of subsistence."

But it is not a passive occupation only that contents the colonist.

"The waters (for drinking) are occupied and enclosed," says Mr. Eyre, "and access to them is frequently prohibited. The fields are

fenced in, and the natives are no longer at liberty to dig up roots. The white man claims the timber, and the very firewood itself is occasionally denied to them. I have myself repeatedly seen the natives driven off private lands in the vicinity of Adelaide, and their huts burned, even in cold wet weather. The records of the police office will show that they have been driven off the park lands, or those belonging to Government, or, at least, that they have been brought up, and punished for cutting wood from the trees there. What are they to do, when there is not a stick or a tree within miles of Adelaide, they can legally take?"

This reckless and brutal application of English law, to a people totally unacquainted with, and incapable of comprehending the social or conventional offences which the law punishes, is not merely the act of individuals, but of the official personages in the colonies, and is sanctioned by the authorities constituted by the Colonial Department at home. Judge Willis states, in an address to a jury when trying some natives,—

"I have, on a recent occasion, stated my opinion, which I still entertain, that the proprietor of a run, or, in other words, one who holds a lease or license from the Crown, to depasture certain Crown lands, may take all lawful means to prevent either natives or others from entering or remaining upon it."

Governor Arthur, by a proclamation of the 15th of April 1828 (approved of by the Colonial minister of George IV.,) strictly commands the aborigines of Van Diemen's Land—

"to retire and depart from, and for no reason, and no pretence, save as therein provided (viz. travelling annually to the sea-coast in quest of shell-fish under certain regulations,) to re-enter the settled districts of Van Diemen's Land, or any portions of land cultivated and occupied by any person whomsoever, on pain of forcible expulsion therefrom, and such consequences as might be necessarily attendant on it," &c.

A more solemn piece of official foolery than a proclamation, in English, to the natives in the bush of Van Diemen's Land, given with all the dignity and phraseology of an edict in his Majesty's name, and approved of by the Minister of State for Colonial affairs, cannot, perhaps, be found in the archives of any modern nation. But it was not merely a piece of solemn foolery; it was a decree of Nero to the wretched natives. Driven from the land from which they had formerly derived their subsistence, they could only exist by trespass, and depredations on those who had settled on it. They were shot like wild beasts by the colonists. The natives of Van Diemen's Land were described by Cook, or some of the early discoverers of the country, as more numerous, warlike, and savage, than the inhabitants of the other countries in

those seas. They maintained their character of bravery, and retaliated on the colonists with desperate fury. Murder succeeded murder on both sides; they were murders when committed by the natives—but only meritorious deeds, deserving a premium, not a punishment, when committed on the natives. This warfare of extermination expired at last from want of victims. The whole native population of Van Diemen's Land had been reduced by famine, disease, infanticide induced by famine, and the fire-arms of the colonists, to 210 individuals, who, in the year 1835, were collected together, and transported bodily to Flinders Island in Bass Straits, leaving the original seat of this wild, but gallant, and energetic, and apparently very reclaimable nation, without a trace that there they had been. In 1842, seven years after this final act of extermination in their native land, M. de Strzelecki found fifty-four individuals remaining, the last of a race of human beings cut off from the face of the earth by the tender mercy of our Colonial Department. We speak of the *razzias* of the French in Africa. Three men only are accountable for them; not a nation. Louis Philippe, Guizot, and Marshal Bugeaud, are alone accountable, to God and to posterity, for the deeds there perpetrated, or allowed. The perpetrators are but the military machinery in their hands. But who are accountable for the *razzia* in Van Diemen's Land? for the *razzias* now permitted in Australia? We employ no soldiery. We lay the flattering unction to our souls that we do not cut the throats of the natives; we do not shoot them, except it be one by one on every pretext the savage stock-keeper can find—we only kill them by hunger and disease—we only take their land, water, hunting-grounds, fishings, fuel, and leave them to perish gradually, to be extinguished in a few years by famine, misery, infanticide, and hardships in the desert, by intemperance and venereal diseases in the towns, and by the extension of English law, with its conventional offences and punishments, to people in a savage state. This process of extermination is going on with silent but fearful rapidity. In New South Wales, one of the oldest and longest established missions in Australia was given up by the Rev. Mr. Threlkeld after many years of toil, and why? Because, as we are told in the Parliamentary Reports on Australian Aborigines, 9th of August 1844,

“This mission has ceased to exist, not from want of support from the British Government, nor from the inclination of the agent, but purely from the aborigines themselves becoming extinct in these parts.”—P. 161.

The same Report says of this mission:—

“It is, however, perfectly apparent that the termination of the mission has arisen solely from the aborigines becoming extinct in these

districts; and the very few that remain elsewhere are so scattered, that it is impossible to congregate them for instruction; and when seen in the towns, they are generally unfit to engage in profitable conversation. The thousands of aborigines, if they ever did exist in those parts, decreased to hundreds, the hundreds have lessened to tens, and the tens will dwindle to units, before a very few years have passed away."—P. 160-1.

"The whole eastern country," says M. de Strzelecki, "once thickly peopled, may now be said to be abandoned to the whites, with the exception of some scattered families in one part, and of a few scattered individuals in another; and these, once so high-spirited, so jealous of their independence and liberty, now treated with contempt and ridicule even by the lowest of the Europeans; degraded, subdued, confused, awkward, and distrustful; ill concealing emotions of anger, scorn, and revenge; emaciated, and covered with filthy rags—these native lords of the soil are dragging on a melancholy existence to a yet more melancholy doom."

Yet are those natives an apt and intelligent race of men, capable, by the testimony of all who have been in contact with them, of receiving instruction and civilization. Mr. Moorhouse, after several years' practical experience, says,—

"They are as apt as European children, so far as has been tried; but they have not been put to abstract reasoning. Their perceptive powers are large, as they are much exercised in procuring food, &c. Any thing requiring perception only is readily mastered; the alphabet will be known in a few lessons; figures are soon recognized, and the quantities they represent; but addition from figures alone always presents difficulties for a while, but in a little time it is understood."

There are several, at least four, schools in which the children of the aborigines make a progress sufficient to prove, even to the colonist, that there is no natural deficiency of intellectual powers in the native race. What may be still more conclusive evidence to him is, that on the Murray River, of which district Mr. Eyre is the resident-magistrate, "native shepherds and stock-keepers are almost exclusively employed, and have been found to answer well. Most of the settlers in that district have one or more native youths constantly living at their houses." But why—with sufficient capacity for instruction, and with schoolmasters and missionaries supported by Government labouring among them—why is the progress of education and religion so inconsiderable, that no results at all are perceivable on the uncivilized condition of the natives? The reason is obvious. The child or youth who has passed a year, a month, a week, with the missionary or schoolmaster, has lost so much time in that instruction which, in his social state, is more immediately urgent—in the practice of finding his daily food in the desert. He returns to his tribe, and family, a better scholar and Christian, but a much worse hunts-

man, and with his perceptive powers and bodily dexterity very inferior, and his capacity of providing subsistence, and of enduring privation of it, very much impaired, compared with the genuine children of the desert. He must return to starve and die among his countrymen, or live an outcast about the towns and settlements of the colonists, trusting to chance employment, and beggary, and theft, for his subsistence, and to intemperance for his enjoyment. Government has established protectors of the aborigines; pays for schools and missions to educate and convert the native youth; distributes blankets and flour, to the value of about £1000 sterling yearly, at certain stations, where the encroachments of the colonists on their subsistence grounds have driven the natives to famine and desperation; and has expended altogether, in twenty years, viz. from 1821 to 1842, on the civilization and protection of the aborigines, about £51,800. All has proved abortive. If, instead of distributing flour and blankets, the money of Government had been applied to teaching the natives to raise flour, and to make blankets for themselves—had been applied to leading them to the first stage of civilization, the dwelling in fixed habitations—the cultivating land of their own for their own subsistence, and acquiring the arts, habits, and wants of the transition period between the migratory and stationary states of society—there would have been an incipient nucleus of civilization for the individuals formed by the school-master and the missionary, to fall back upon. They would not have had to return to savage life, and resume savage habits. In the way the money has been applied, schools, missions, and protectorates have all proved failures; and Lord Stanley, in his letter to Sir George Gipps, of 20th December, 1842, given in the Parliamentary Reports, expresses strongly his opinion, that “the whole has proved an unnecessary and profitless expenditure.” The plain truth is, that where iniquity is at the root, the fruits will be disappointment. The root of iniquity was in the Crown seizing and granting, or suffering its colonial governors to grant, to individual colonists, land in Australia, to which, in equity, the Crown had no right at all; and to which, in true colonial policy, the rightful native possessors ought to have been admitted to a concurrent right and possession—ought to have been settled on their portion of the land in a civilized way—taught to use it, either in tillage or pasturage, as most suitable to the district, for their own subsistence—and protected, as minors, in their properties and persons, by resident magistrates. The iniquity of the Government was naturally followed up by the iniquity of the colonists, and of their local rulers; and by the weakness of Government permitting misrule, and a ferocious spirit of hatred and persecution of the natives, to spring up and show themselves

with impunity, even among men in authority. We have quoted already Judge Willis' deliberate address to a jury, on the application of the English law of trespass to the natives who, in search of water or food, may cross lands which have been granted in perpetuity, or on license as squatters, to English colonists. A Magistrate of the colony, and a commissioner of Crown lands in the Geelong district, in an official letter, addressed to the Superintendent, and quoted by Mr. Eyre, gives it as his "candid opinion," that "the only plan to bring them (the natives) to a fit and proper state, is to insist on the gentlemen in the country to protect their property, and to deal with such useless savages on the spot." This dealing on the spot, recommended by this ornament to the colonial magistracy and Crown-land management, is but too faithfully followed in the spirit in which it is recommended. The native crossing the territory granted by squatter license to the great sheep-master, in order to get at the roots, or other food he has been accustomed to take from it, or to get at the water in it, on which, at certain seasons, he depended, is hunted off with dogs, shot at, driven out of sight into the bush, by the shepherds and stock-keepers, who are generally convicts, the refuse of society—better fed and better armed savages than the natives, but altogether as savage. Retaliation follows injury and injustice, and is followed by re-retaliation, exasperation, despair,—murders. These disorders, and the sure and silent razzia of starvation, are rapidly exterminating the native race. The humanity and ability of the eminent men who have been ministers of colonial affairs in the course of the last twenty years, in too rapid succession to be effective ministers for such distant colonies, have not been able to overcome the *vis inertiae* of the Colonial Department and its routine, and at once to apply to a seen and acknowledged injustice and cruel evil, the speedy remedy of a vigorous return to what is just and right in the dealings between the British nation and the aborigines. They are entitled, as the original proprietors of the land, to their subsistence from it, to acknowledged and protected rights of property, and to equal social and legal personal rights. At present, it appears from Mr. Eyre's work, the oath or evidence of the native against a white man is not admitted in the Australian courts of law; while the oath of the white man, although he may have been a convict transported for perjury, is received against the native. Yet, by a beautiful fiction of law, the *benefit* of the law of England is said to be extended to the natives of Australia—that is, they are punishable for offences under English law; for such offences as trespass, begging, vagrancy, taking firewood, hunting, &c. which, to men in a state of nature, are not intelligible offences; and the testimony of their neighbours, proving an *alibi*, or a non-identity, or an impos-

sibility of the party being guilty, is not admitted. Native evidence, even against a white man, ought surely to be taken at *quantum valeat*, and if sustained by circumstantial evidence, it ought to be held good. Schools, missions, flour, and blankets, would soon follow property, fixed habitations, and the protection of equal law.

Lord Stanley is entitled to the credit of having made a wise and vigorous step towards a better system, during his colonial administration. He fixed a price of a pound sterling per acre for land in Australia. Many consider this measure unwise, and a great discouragement to emigration; for who, say they, and very justly, will go to Australia to pay twenty shillings per acre for land, when he can get land in America at three shillings and sixpence per acre; and land naturally of better quality, as M. de Strzelecki proves by chemical analysis of the soils of the two continents. The measure is, nevertheless, wise. It may have discouraged the emigration of small capitalist emigrants from the mother-country to the Australian colonies, but it has checked an urgent evil—the squatter system—which is equally adverse to their true prosperity and interests, and to the rights and existence of the aborigines. By this system, the great flock-master obtained a temporary right, by taking out a license, to appropriate vast and unknown tracts of pasture-land for his flocks, to keep the natives and all other intruders from them, and to be the uncontrolled master in the interior. It is now required that the flock-masters should locate themselves, choose, and pay for, three hundred acres of land within their squatter license; and they and their shepherds must become fixed inhabitants, instead of a class of wandering white savages.

Mr. Eyre ascribes the extinction of the indigenous tribes of Australia, so rapidly going on wheresoever they are in contact with the white race, to physical causes—the famine, disease, intemperance, vice, produced by the misrule of our colonies, by the encroachments permitted upon their land and means of subsistence, and by the infanticide and the outrages against each other, and against the colonists, excited by hunger and by the change of habits of life, among those in any frequent communication with our colonists. M. de Strzelecki, while he admits, to the fullest extent, all these causes, and corroborates all the views and statements of Mr. Eyre, whose work was published after M. de Strzelecki's, thinks that the decrease and final annihilation of indigenous races, which seems always to follow the colonization of white people, may be a mysterious law of nature in operation on the human race. The effects of oppressive misrule, of European intemperance, diseases, habits of life not suited to the constitution of the aborigines, of European fire-arms, of starvation, and all other conceivable causes of decrease of native population,

should appear, he thinks, in an increased rate of mortality among them, a greater number of deaths; whereas he finds the decrease is owing to a smaller number of births. M. de Strzelecki has lived among different races of aborigines, the native tribes of Canada, of the United States, of California, Mexico, the South American Republics, the Marquesas, Sandwich, and Society Islands, and those, finally, of New Zealand and Australia; he has examined the oldest aborigines of every country—the natives who remember the first American war in the United States, the government of the Jesuits in Brazil and California, the arrival of Cook and the early navigators in the South Sea Islands, New Zealand, New South Wales, and Van Diemen's Land; and he comes to the remarkable conclusion, from this wide scope of information and personal observation,—

“That the longevity of these aborigines, who are decreasing and vanishing from the earth, before the steps of the white man, has not been abridged, that the rate of mortality has not been increased, but that the power of continuing or procreating the species appears to have been curtailed.”

His inquiries, also, have led him to the conclusion, that this sterility of the indigenous races, wheresoever the European race is found, is confined to the female, and that the result of the casual union between an aboriginal female and an European male is—

“That the native female is found to lose the power of conception on a renewal of intercourse with the male of her own race, retaining only that of procreating with the white man. . . . Hundreds of instances.” M. de Strzelecki goes on to say, “of this extraordinary fact are on record in his memoranda, all tending to prove that the sterility of the female being relative only to one and not to another male, and recurring invariably under the same circumstances amongst the Hurons, Seminoles, Red Indians, Yakies, (Sinaloa) Mendoza Indians, Araucos, South Sea Islanders, and natives of New Zealand, New South Wales, and Van Diemen's Land, is not accidental, but follows laws as cogent, though as mysterious, as the rest of those connected with generation.”

If this fact be true, and verified, as it possibly might be, by observation of the existence of any similar law of nature in cases where mules, and hybrid varieties of birds and inferior animals, are produced—and verified, also, by more numerous observations, and by observers directing their attention specially to the inquiry in situations in which Europeans and natives of other races live together—it would be one of the most remarkable additions made, in our times, to physical science. If analogy could be built upon in such an inquiry, the analogous extinction of varieties, species, and classes of vegetable and animal existences, and the appearance, in their stead, of other varieties, species, and classes, to cover and inhabit the earth—and ap-

parently without sudden or violent convulsion, destruction, and creation, but gradually, the new replacing, yet mixed with the old—may be traced in the organic fossils in the cabinet of the geologist. But if we look to fact instead of analogy, we find that no such law of nature is in operation in the United States of America, where the white race and the black exist together in the greatest numbers, and where the black race, although in slavery, is multiplying in even a greater ratio of increase yearly, than the European race. We do not hear of it in our West India Islands, where the black race, since their emancipation from the toils of slavery, are, it is understood, multiplying rapidly by the side of the white race. We do not hear of it in Ceylon, nor in any locality where misrule, slavery, or other causes of physical privation do not prevent the natural tendency of the human race to multiply up to its means of subsistence. Slavery itself does not check this tendency in the United States, because subsistence in sufficient abundance is afforded, slave-breeding being more profitable than starving the slave stock, or working them out. The foundation-fact, also, of M. de Strzelecki's theory—the decrease of births among the indigenous races in communication with the European race—may be accounted for without any mysterious law of nature, simply by the change of habits, of food, the additional hardships, the want, the state of famine, and the infanticide and premature births, and rarity of conception produced by such a change and such a state, all indirectly proceeding from the vicinity of the European race, and their encroachments on the former hunting-grounds, and means of subsistence, of the indigenous race. In America, these appear to have been the causes of the extinction of many native tribes; and the same causes are in operation in Australia. The introduction of intemperance, prostitution, and disease, of improvident habits, and of habits of living incompatible with the dexterity and exertion required to obtain their subsistence in the forest in their former way, no doubt, add to the physical causes of depopulation both by decrease of births and increase of mortality. The subject, however, requires and deserves investigation by the philosopher.

The eighth section of M. de Strzelecki's work treats of the agriculture of the colonies of New South Wales and Van Diemen's Land—of the soils, the pastoral region and sheep farming, the village region and husbandry, and the improvements applicable to each; and, although brief—occupying scarcely a hundred pages—it is the most important and interesting portion of the volume to the readers who are not conversant with geological science, but are desirous of information on the economy, capability, and agriculture of these vast colonies. The

mountain-range running through New South Wales and Van Diemen's Land, and dividing the waters falling towards the east coast from those falling towards the west and the interior, is at an average distance of about seventy miles from the sea on the east side of New South Wales, and is of an average altitude of 3500 feet. In the country between this range and the coast, is the cultivated land. In Van Diemen's Land, the mountain-range winds in zigzag through the island, with an average distance from the sea of forty miles, and an average altitude of 3750 feet. Limestone is more common in Van Diemen's Land than in New South Wales. The chemical analysis of the preponderating soils in each country, shows that the soils of New South Wales, in general, contain less matter soluble in hydrochloric acid by one-third, or one-fourth, than the soils of Van Diemen's Land; and these insoluble soils contain a less proportion of acids and alkalies, and a larger of silica. Compared with the virgin soils which M. de Strzelecki has examined, on the same chemical principles, in Canada, the United States, Brazil, Mexico, Guatemala, and other countries, those of New South Wales and Van Diemen's Land are greatly inferior in the amount of salts and alkalies they contain, and, consequently, in natural fertility. The Australian graminæ are wonderfully adapted to this lower fertility of the soil, showing, by incineration, that they do not contain the same quantity of alkalies as the English grasses, and therefore do not need a very rich soil. The family of Eucalyptæ, which flourish all over the country, are wonderfully adapted to it, as, by shedding their bark, the Eucalyptæ can dispense with the annual supply of alkalies which trees shedding their leaves would have extracted from the soil. M. de Strzelecki divides the soils of the two colonies into two classes. The first is, by position, exposed to be wasted and denuded by atmospheric influences—winds, flood, drought, and other local causes—and is naturally impoverished, and yields only pasture as grazing land. The other class is enriched by the drift and diluvium from the first, and is applicable to agriculture. The pasturage land of New South Wales and Van Diemen's Land presents, in its appearance, nothing in common with the prairies, savannas, llanos, or pampas of the American continent, of the steppes of Asia, or the mountain pastures of the Alps, or the Grampian or Highland hills. The Eucalyptæ, with a perpetual olive green foliage, cover the face of the country without affording shade or shelter, and without impeding the vegetation of the grasses.

The vast extent of the pasturage suitable for sheep, the ease and certainty of rearing the fine woolled breed of sheep in the Australian climate, and the profitable results to those who first made the attempt on a large scale; the character, too, and former position in

life of many of the colonists—officers, or gentlemen with some money, but no habits of patient industry in the slow and laborious operations of common husbandry—turned the capital, exertion, and mind of the colony of New South Wales, unfortunately for its prosperity as a colony, to the raising of fine wool for the English manufacturers. The colony certainly was in want of some staple article as a basis for its prosperity—some article which its soil, climate, its mineral riches, or the industry and energy of its inhabitants, gave it an aptitude, an advantage, and a kind of monopoly, in producing for other countries. The tropical products, the mineral products of South America, the far more valuable industry and activity in fisheries, shipping, and trade of the Northern American States, are such a staple basis of a colonial prosperity. Wool is not. It is the worst product a new colony could have turned its capital and attention to, because the production of wool employs less of combined industry and art, diffuses less occupation among the people in proportion to the land it requires, and is thus of less civilizing and beneficial influence than almost any article raised for the use of man. The shepherd state, either in the individual, or in a class or a society, is a stationary state, out of reach of the civilizing influences of man working upon man. Each unit lives isolated, for itself and by itself, and not connected by industry with any other unit in the mass. Pastoral countries never advance until they get out of the pastoral state. It was a mistake in colonial policy to give encouragement to this social state in a new settlement. It was preparing the colony for a retrograde, not a progressive movement in civilization. It is scarcely thirty years, we are told by M. de Strzelecki, since the first ram was imported into New South Wales, and now the number of sheep in the colony is estimated at nine millions. If there be no gross error in this estimate, the number of shepherds, allowing one to six hundred sheep, which M. de Strzelecki informs us is the usual and necessary establishment in sheep flocks, must be 15,000 able bodied men, convicts, emancipated or apprenticed, and the refuse of society, following the idle, solitary, least civilizing, and least under inspection, and control, of all occupations. These men, living in an isolated, half savage state, apart from the intercourse and restraints of society, and from the influences of regular industry, and with a native population at their mercy, over whom they have the superiority of fire-arms, must become like the savages they are exterminating. The posterity of 15,000 men, originally criminals, without settled house and home, living singly in the desert, wandering like the natives over the face of the country as their flocks may lead them, lodging by night in temporary bark wigwams, and unprovided with the comforts or

decencies or education of civilized or Christian life, and not even knowing the wants and habits of civilized Christian men, must inevitably become a mere white tribe of natives, as savage, ignorant, and uncivilized as the aborigines. The hunters, trappers, squatters, backwoodsmen of America, are the pioneers of civilization, exploring, clearing, preparing the forest for the husbandmen of more settled civilized habits, and these again are succeeded by men of higher civilization, of skill, capital, and refinement. But the stock-shepherds of Australia are succeeded by no class in a more advanced state; and the very small wages, not above £16 a year, which, owing to the depressed value of the sheep stock the master can afford to pay, do not admit of their advancing themselves to the state of settled husbandmen, even if their erratic life, with food in abundance, and light desultory exertion, left them any taste for regular work, and settled habits. The depreciation in the value of the sheep stock of Australia, out of which the wages of this class must be drawn, is almost unprecedented even in the annals of speculation. M. de Strzelecki informs us that the value of sheep stock in 1843 is ninety-six per cent. less than its value five years before in 1838. The number of sheep which cost in 1838 £100 sterling, are worth to the unfortunate owner only £4 in 1843. The speculation of raising fine wool, and making large fortunes by sheep-farming in Australia, was originally false, because wool is the product of every country, as well as of New South Wales, and a price which barely pays the cost of transport from New South Wales, of so bulky a commodity as wool, allowing fair freights to the ship-owner, is a price which encourages the production of wool in Europe, where, in general, it is a secondary, not a primary, object in farming, and where the manure and mutton leave a profit even if the wool were given away. Germany, Poland, Russia, can also furnish wool finer, or more equal in quality, and much cleaner, than wool from large unmanageable flocks in an uncleared wooded country; because each flock is small, and being subsidiary, in general, to an arable farm, is attended to individually, sheep by sheep, as to breeding, and keeping the fleece from impurities; and in Saxony, Silesia, and all the countries producing fine wool, one shepherd, who is paid, not by wages, but by a share of the price obtained for the wool, is employed for every 200 sheep. When shipping found employment, and freights from Australia rose to be remunerative, and when the price of fine wool encouraged the production of it in Europe, the wool-growing speculations in New South Wales became ruinous to those engaged in them. They were, in fact, not unlike the railroad speculations of the present times. Fortunes had been made, but not from the actual proceeds of the wool, or from the

actual fares of the railroad, but by selling the sheep stock, or the railway shares, which were to grow up in a little time to be highly remunerative and profitable. The value given for the sheep, as for railroad scrip, was given for future, expected, and, as it has proved, imaginary profits. Sheep paid for at the rate of about £3 sterling a head, are now boiled down for the sake of the tallow, and are worth to the unfortunate owner, about 2s. 11d. The prospect of any material improvement from the present extreme depreciation, is not very bright. The abolition of the corn-laws will necessarily turn the attention of the British farmer, especially on secondary soils, from grain crops to the secondary branches of profit—to the rearing sheep, and growing fine wool, among others formerly neglected; and on the continent the keeping fine-wooled flocks, as a subsidiary branch of arable farming, is rapidly extending.

It is not the Australian flock-masters only, but the colony that has suffered, by the capital, industry, and spirit of the colonists having been turned from the paths of steady application to business, and the civilizing, enriching influences of industry in the arts or trades suitable to their condition, to a rude wild life in the desert, a life to be passed any how—without even the decencies of a settled life—in pursuit of a speedy fortune, to be overtaken as soon as possible, and enjoyed in England. Fortunately for the true interests of the colony, the whole of this bubble of a golden fleece, by which, without employing industry or effort, except in seeking new pasture lands, and by merely owning and keeping sheep flocks on gratuitous pastures, young gentlemen were to go to Australia and make fortunes, and return to England, fell into a collapse from which it will never be blown out again into its former unwholesome dimensions.

M. de Strzelecki considers New South Wales as eminently a pastoral country; but its pastoral capability should be joined with, and made subsidiary to, its agricultural improvement, which, by irrigation, rotations of crops, and manure, admits of an unlimited extension. At present, New South Wales is reckoned to have 120,000 acres, and Van Diemen's Land 160,000 acres of land under tillage. M. de Strzelecki gives a chemical analysis, on the principles of Liebig, of the soils of about forty farms both of the least and of the greatest productiveness in the two colonies, and shows that the exhaustion of the soil, by injudicious over-cropping, is going on rapidly in the arable farms of New South Wales, and that sheep husbandry judiciously carried on in conjunction with tillage, not as a distinct money-making speculation, affords the means of restoring the chemical elements exhausted, or originally deficient in the soils of Australia. The 9,000,000 of sheep in New

South Wales would, according to the ordinary allowance in the husbandry of this country of 200 sheep to an acre each day, manure in three days more than all the arable land in the colony. But in New South Wales the squatter's license appears to be a license to occupy, burn, and waste a tract of pasture-land. The dividing mountain-range between the eastern and western waters, was surrounded by the flock-masters and their flocks, in search of pastures, and a boundless range of sheep-pasture was thrown open to them. But even boundless pastures may be exhausted by wasteful pasturage, and flocks, if not innumerable, unmanageably great. No system, or rotation in using, or reserving the pastures—no keeping a succession in feeding on the land—no clearing away of fallen trees—no division of the sheep according to their ages, to follow each other on different divisions of the land, nothing was attended to but increasing the numbers of the flock, wandering in search of new tracts to squat in, leaving the old tracts deteriorated by burning the old grass, feeding too close the new, and exposing a bare soil to denudation from drought and weather. Burning the grass is, on chemical principles, held by M. de Strzelecki to be injurious to the soil, and the future vegetation; and where the ground is left destitute of cover, either by the old grass being burned, or the new eaten too bare, the sun, and wind, and rains, reduce it to a barren waste. In Van Diemen's Land, the extent being less, the pasture land was appropriated, and each flock-master pastured his sheep on his own land, and, on account of the contiguous fences, burning was prevented, and the evil was less. In New South Wales the flock became unmanageably large, the pastures locally overstocked, because wasted; the search after new pastures to be deteriorated, wasted, and abandoned in turn, became the main business of the flock-masters and their shepherds, and they, their followers, and their capital, were in a very slight degree, if at all, conducive to the social, moral, or industrial prosperity of the colony, while gambling in sheep stock, or bank shares, or wandering, in a half civilized condition, with their flocks, and searching for new tracts to squat in, occupied the capital, energy, and mind of the colonists. We are told by Mr. Eyre that 300 vessels, chiefly American and French, find employment in the whale fishery in the adjacent seas, and in the very bays of Australia. It was not by such steps that the early settlers in North America raised these colonies to the importance of empires.

Much obloquy has been thrown on the colonial administration of Lord Stanley, and of the Governor of New South Wales, Sir George Gipps, for obliging the flock-masters not merely to pay for a squatter's license, and to pay a yearly tax on their herds and flocks, but to purchase land, and to settle and locate them-

selves on fixed property, in the tracts for the pasture of which they have obtained squatter's licenses. The details of both these measures may be objectionable, or severe; but the principle of both must appear to all men, free from colonial prejudice or bias, to be altogether just and wise. It is just that the vast property of nine millions of sheep should pay something towards the colonial expenses of a police to protect that property, of roads, bridges, harbours, for transporting the yearly produce of it. Although beyond the pale of settled society, the flock-masters and their property have the benefits of law and government, and should, in justice, pay for those benefits, as well as the agricultural settler, or the town inhabitant. To oblige the stock-masters to settle themselves, and their shepherds, in a fixed locality, with fixed property in land, instead of wandering over the face of the country in a half-civilized state, without the religious instruction, decencies, comforts, or tastes of Christian men, appears also a measure altogether wise and reasonable. To allow fifteen thousand shepherds and stock-keepers, many of them convicts of the most reckless, ferocious habits, to roam after their flocks through the vast country, with fire-arms in their hands, and beyond superintendence and control, without fixed habitations, without religion, without instruction, without civilization, or humanity, and exterminating at their pleasure the natives within shot, and boasting of the numbers they have killed, would be allowing a state of society to exist, and grow up, disgraceful now, and dangerous hereafter. It is very true that by this limitation to the indefinite extension of the sheep-breeding in Australia, the flock-master, with four thousand sheep, will not be able to increase his flock to eight thousand, then to sixteen thousand, and then to two and thirty, and have merely to go in quest of new pasture land, and a new squatter license, to do all this; but there are higher interests involved than the supply of our woollen manufacturers with five thousand tons' weight of wool yearly, or the profits of a small body of sheep-masters. The protection and rights of the natives, their civilization, and that of the men, not less savage than they, who wander after the flocks, and are already a formidable body—the civilization of the flock-masters themselves, or at least of their posterity, by obliging them to join agricultural to pastoral occupation, require that a nucleus of civilization, religion, education, the useful arts, police, law, and a homestead for all these social influences, should be erected within each district comprehended in a squatter's license. These will become villages, and the squatter the lord of the domain. His wildly extensive wool speculations will be disturbed. He will scarcely acquire a fortune to return with to England; but he, and his shepherds, and stock-keepers, will become fixed settlers, living with the institutions of

education, religion, and law around them, and with stationary homes, regular employment, and with a growing husbandry in which the sheep flock takes its proper place, as a secondary, not a primary object in civilized life.

We have left ourselves too little space to notice as it deserves, the interesting narrative of Mr. Eyre's journey. Of his valuable account of the state of the aborigines we have taken advantage in our observations. He travelled from Adelaide, in the south-east quarter of Australia, near the mouth of the Murray River, to King George's Sound, in the south-west, in the Swan River district. The object of this expedition, which was fitted out at the joint expense of the Colonists, the Government, and Mr. Eyre himself, was to discover some practicable route for the flocks of South Australia to reach the pastures supposed to be in the interior, and in the vast country called Western Australia. When we look at the map of Australia we find all that has yet been occupied, explored, or reached by Europeans, might almost be clipped off from its edges, without making any sensible diminution in the vast blank. The middle of the country is under the tropic of Capricorn, and the length of this line, from east to west, is about 2300 English miles, and not a mile of it is known. The longest line that could be drawn through this continent would be from Cape York, the extreme north-eastern point of the Peninsula, forming the east side of the Gulf of Carpentaria, to Cape Leewin, the extreme south-western point of the land. This line would be about 2400 miles. The shortest land line would be from the head of the Gulf of Carpentaria in the north, to the bottom of the great Australian bight in the south, and this line would be about 1100 English miles. On these lines not a foot of the interior country, it may be said, is known. The farthest advance from Sydney, the River Darling, is but 500 miles, in a straight line, from that town. The shore-side is all that is known of this immense country. The great impediments to exploring the interior are the want of water, and the impenetrable scrub, or brushwood, in all those districts south of the tropic, from which exploring expeditions have commenced their routes. Mr. Eyre set out with a party of five Europeans, two natives, thirteen horses, forty sheep, and two drays, from Adelaide northwards, towards the head of Spencer Gulf. It would certainly be gross presumption in strangers to the country to question the adaptation of Mr. Eyre's means to his end—the suitability of loaded drays, and a train of horses and drivers, to explore a land known to be a dry desert, in which want of water, even for one or two individuals, might, from what was known of the country, be expected. It is not in every country, even in Europe, that eight men, thirteen horses, and forty sheep, could

find water, in a dry season, if they travelled with no previous knowledge of the land. Want of water was the main impediment to Mr. Eyre's advance into the interior; yet every where, even when almost perishing from thirst, he found that natives, single or in families, who had come from the interior, were wandering all around him, who must have had water for their smaller wants, although thirteen horses and their drivers could not be supplied. However presumptuous, therefore, we must say, that when we first read the muster-roll, the outfit of drays, and horses, and drivers, and luggage, and sheep, and such a preparation for comfort, we laid down the book with the impression, "here is to be no discovery." Our impression was erroneous. Mr. Eyre travelled first about 200 miles, west of north, to the head of Spencer Gulf, then about the same distance east of north, when his advance was interrupted by a great salt water lake, or rather puddle, for it was soft mud incrustated with salt, and having water only in the middle, and at a distance. This Torrens lake appears, by Mr. Eyre's account, to have a water course between it and the head of Spencer Gulf, which was dry, at least his drays could cross it. Whether the water of this inland sea runs out in rainy seasons into Spencer Gulf, or whether the ocean in spring-tides, and with particular winds, may not so fill Spencer Gulf, that it runs in by this water-course, and forms this inland lake, seems not ascertained. On the west, north, and east, this lake, or sea of mud, surrounded the land to which Mr. Eyre had penetrated, an arid barren tract, and from Mount Serle, and Mount Hopeless, he ascertained that he was upon a peninsula jutting into Torrens lake, of which the water is salt, and over which no opposite land was visible. It is an ingenious conjecture of Captain Sturt—now engaged in an expedition to the interior of this land—that the Continent of Australia has, at no very distant period, been an archipelago of islands, separated by straits, and seas, the bottom of which has been raised above sea-level, at least so as to be dry, and to exclude the ocean all round, while in the interior, the old sea level may have remained, and a great inland sea may be there receiving the drainage of all the surrounding country. It gives some probability to this conjecture, that all around the great bight of the south coast of Australia, about 1200 miles, Mr. Eyre met with no river taking the drainage of the back country to the sea. He describes the cliffs as about 200 feet to 400 feet high, and the country a barren tableland covered with scrub, but it must have a drainage to the north, into the interior, for no rivers equivalent to such a vast space of land, run into the sea, either on the south, or west side of the island. Mr. Eyre returned from his northern advance to the head of Spencer Gulf, and from thence proceeded westward

along the shore, often, from the difficulty of getting his drays through the country, on the sea-beach; and after much suffering, and a perpetual going and returning over the same ground to bring up water for the horses, after losing them all, one by one, after losing the last of his European attendants, (he had sent back the dray-drivers and useless people,) by the hands of his two native boys, who murdered him, he was fortunately relieved by a French South Sea whaler on the coast. He renewed his journey after this seasonable refreshment, and with a single native who had adhered to him, reached Albany in St. George's Sound. The sufferings, escapes, and spirit of endurance, make this narrative very interesting; but still we find natives every where, who contrive to find food and water, and therefore we ask at every page, were not these sufferings and escapes unnecessarily incurred, and this spirit of endurance unnecessarily called forth? The man who is to travel into the interior of this land, must really abandon all the colonial creature-comforts and conveniences that require drays and horses, must live with the natives, and as the natives live. If beasts of burden are to be used for transporting provisions, the camel, not the dray-horse, appears to be the animal provided by nature for such countries; and the importation of a few, with their drivers, from some port on the Red Sea, would be a necessary preliminary to an effective expedition into the mysterious interior of this island-continent. It is the duty of Government to give the means of exploring this mass of land, and to explore it with a higher purpose than to extend the miserable objects of the Australian wool-grower, or the Leeds manufacturers—to take civilization and religion, as well as sheep-stock and wool, into consideration.

ART. II.—*A Supplement to Hume's Commentaries on the Law of Scotland respecting Crimes.* By BENJAMIN ROBERT BELL, Esq., Advocate. Edinburgh, 1844.

THE work of Baron Hume has been, for many years, the greatest and, with scarcely an exception, the only institutional authority on the criminal law of Scotland. The production of an eminent lawyer, and an intelligent and accomplished man, it is a great repository of criminal jurisprudence, into which have been collected the manifold materials industriously gathered by the learned author from the records of the Supreme Criminal Court, and many less accessible sources of information, illustrated by elaborate and learned exposition, and arranged with much care into the form of a systematic treatise. It would be difficult to estimate the amount of obligation which the student of Scottish law owes to Baron Hume, for this bright and almost solitary light to guide his course over the most important and interesting portion of the whole field of legal science—the criminal jurisprudence of his own country. It would be still more difficult to estimate the influence of Baron Hume's work as a guide to the practical administration of the law—an influence in some respects salutary, in others injurious. The very pre-eminence and supremacy (if we may so speak) of his authority, has, in many respects, been productive of the most beneficial consequences. His work, and the remarkable respect accorded to it, served as a guide at a period when uncertainty was perilous, and discretion unsafe; it gave increased consistency and fixedness to the recognized principles of law, and tended, in no inconsiderable degree, to secure uniformity of decision; it operated as a check on arbitrary discretion, and a restraint on the assumption and exercise of that indefinite and dangerous power termed the "native vigour" of the Court of Justiciary.

This "native vigour" consisted in a power of departing at pleasure from the ordinary province of judicial duty—a power of creating new crimes and new punishments by judicial, instead of legislative authority—a power, in short, of making, as well as of expounding the law. This power was once freely exercised and boldly defended; it was vehemently maintained to be essential to the vitality and healthy action of the Court; and its advocates contended that its existence and exercise were much for the benefit of the public, and formed a peculiar recommendation of the criminal law of Scotland; and that it was unreasonable, if not disloyal, to desire to impair or restrict it. It does not now find

quite so much favour; its necessity or expediency may now be questioned with comparative impunity, and few would wish to see it in active exercise, though some very ardent admirers of the wisdom of our ancestors still venture to defend the propriety of its existence in a state of harmless negation.

For our own part, we think, that such a power is beyond the law, and therefore unconstitutional and dangerous. We believe it to be ridiculous in negation and tyrannous in exercise, and indicative not of the health or energy, but of the feverishness, and weakness, and disorder of the judicial system. The proper function of judges is *jus dicere*, not *jus dare*; and nothing is more perilous to constitutional government and public liberty, than the confusion of the judicial and legislative departments of the State. The voice of the judge is but the voice of the existing law, statutory or common, which it is his part to declare and administer. New laws must proceed from the Legislature—from the three estates of the realm—in whom alone rests the power of enacting what all subjects are bound, as subjects, to obey. In every free country, the obligation to obedience presupposes the enactment and promulgation of law by constitutional authority; and the judicial enforcement of law presupposes the obligation to obedience. To enforce by punishment a law never previously promulgated, is obviously unjust, and inconsistent with the first principles of constitutional freedom; but to give to judges the power of first making law by their own authority, and then enforcing by punishment the law they make, is to use the forms of justice to perpetuate oppression.

But let us not be misunderstood. We by no means say, that no offence is indictable, except such as have been previously indicted, or that a specific legal denomination or direct precedent is necessary to the constitution of a crime. On the contrary, we admit and admire the comprehensiveness of the principles of our common law; and very few, indeed, have been, or can be, the crimes which are not legitimately within these principles. We admit, that a new *form* of offence, not declared by any statute, nor specifically described by any institutional writer, nor strictly referable to any direct precedent, may be justly punished as a crime. But then it must be new in its *form* only, not in its *nature*; it must be within the known prohibitions of existing law, either statutory or common; it must contain within itself those elements, not merely of wickedness or moral wrong, but of crime or public wrong, which have been previously recognized as entering into the substance of an offence punishable by law. Though novel in its form, circumstances, or details, it must, in its character, imply the breach of some enactment previously promulgated, or some principle previously recognized, so as to

bring it within the reach of punishment by any constitutional authority. If it be altogether original, so new in its whole nature, that it never was previously considered as a crime—if it be not provided for by any statute, and cannot be brought within the plain meaning of any former decision, or any principle previously sanctioned as part of the common law, then it is beyond the powers of the existing law, until the Legislature interposes. This may lead to temporary inconvenience, and to the impunity, it may be, of the guilty party, whose ingenuity strikes out an original crime; but surely that is a far lighter evil than that the first principle of public justice should be violated, and that the new offence, which existing law cannot reach, should be punished by an act of judicial legislation—or, in other words, by the exercise, on the part of the Court, of “native vigour.”

This power has sometimes been exercised in the infliction of punishment of a new and unprecedented character, as applicable to the particular offence. For instance, the punishment of verbal sedition by transportation for fourteen years, in the case of Thomas Muir and others, in 1793, was not attempted to be justified, either by the direct sanction of any statute enacting that punishment, or by reference to any precedent authorizing its infliction, but was rested, on what was termed the inherent power—the native vigour of the Court. One of the Judges (Lord Swinton,) did certainly refer to the authority of the Roman law, quoting in support of the right and propriety of inflicting on Mr. Muir the punishment of transportation, the following passage:—“*Actores seditionis et tumultus populo concitato pro qualitate dignitatis aut in furcam tolluntur, aut bestiis obijciuntur, aut in insulam deportantur;*”—adding with apparent complacency,—“We have chosen the mildest of these three punishments.” But the Court generally preferred the exercise of “native vigour” to falling back on the punishments of the Roman law, of which, though “the mildest” was then taken, the most grievous might have been preferred on the next occasion. One Judge (Lord Abercrombie,) said, in Sinclair’s case,—“Suppose no statute in our books, or any mention made of sedition, and that the first instance of it had occurred in November 1793, still this Court would have had power to take cognizance of it, and to inflict, by common law, the punishment of transportation.” Another Judge (Lord Eskgrove,) said, “The powers of this Supreme Court at common law, extend to every offence which common law, or *right reason*, declares to be a crime;” that of course being “*right reason*” which the Court at the time thinks right. And the Lord Justice-Clerk (Braxfield,) said, “I have always held this Court to possess a common law jurisdiction, to the effect of inflicting any punishment according to the quality of the offence, less than

death, for every crime the punishment of which is not specifically defined by statute."

At other times, this power has been exercised in the creation of an offence, in the declaring certain conduct to amount to a crime, though never previously prohibited or treated as criminal. This was done in regard to combinations to raise wages. The peaceful and orderly combination of workmen to procure an increase of wages, was declared by the Court of Justiciary to be a crime by the common law of Scotland, and several persons were sentenced to severe punishment for the commission of this offence, which was confessedly not within any statute, and had never previously been made the subject of prosecution. It did not contain within itself any one of the elements of known and recognized crime, and it was created an offence, simply by an act of "native vigour" on the part of the Court of Justiciary. It was then thought dangerous to permit, and proper to repress by punishment, every combination of workmen, however peaceful, temperate, and decorous, adopted for the purpose of procuring an increase of wages from their employers; and on this notion of probable danger to the public interests, the Judges of the Court of Justiciary proceeded, by their own authority, to create and punish an entirely new offence.

Nothing can more clearly illustrate the danger of exercising, and therefore the inexpediency of possessing, an inherent creative power in a matter of so much importance as the constitution and punishment of crime, than this instance of combinations. Since the date of the decision of the Justiciary Court, declaring combination to raise wages, though peaceful and orderly, to be a crime, because supposed to be dangerous, it has been deliberately and unequivocally declared by the Legislature, that when not accompanied by acts or threats of violence, such combination to raise wages is not a crime, because ascertained not to be dangerous, but often essential for the protection of the operatives, and therefore meritorious. The law, as enacted by Parliament, on considering the nature and tendency of peaceful combinations among workmen, and the necessity under which they are placed, of meeting, by united effort, the combined arrangements of their employers, now protects these combinations; while the law, as declared by the Court of Justiciary, visited them with severe punishment. Yet there was no change in the common law, but only in the opinion entertained of the dangerous or salutary nature of combinations, unaccompanied by violence. It is obvious that the operatives who were punished for peaceful combination in 1813, and whose peaceful combination now would be protected by law, just fell victims to the "native vigour" of Scottish criminal law.

Now it is, in our opinion, one of the great advantages arising from the high authority of Baron Hume, that, by the introduction of additional certainty and precision into the system of our criminal jurisprudence, his work, with all its defects, served practically to limit the field, and contract the boundaries of judicial discretion, and thus to restrain the exercise of this creative energy, and diminish the number of British subjects sacrificed to humane, but mistaken notions of hypothetical danger, and supposed expediency. It is true that Baron Hume did not so intend. He was himself the admirer and advocate of the "native vigour," and not disposed to put any effectual check on the exercise of a discretion of which he approved; but the adoption of his book as an exposition of the principles of the law of crimes, tended to produce most salutary results, which he himself did not contemplate or desire. The very presence on the table of the Court, of a systematic work of acknowledged authority on criminal law, operated to some extent as a protection to the public, and a sedative to the Bench. We are ready to acknowledge that, even in the most questionable instances, and most startling exhibitions of "native vigour," to which we have adverted, the decisions of the Judges were given in the honest belief that they constitutionally possessed the power which they exercised, and with the sincere desire to repress, by adequate punishment, offences which they thought dangerous to society. It is of the arbitrary character of the discretion, and not of the motives, or even the mode of its exercise, that we now complain. Against the principle of judicial legislation we protest; the promulgation of law, we think absolutely essential to its authority; and the right, on the part of Courts of Law, to create and punish new and original crimes, in virtue of "native vigour," we take the liberty respectfully, but firmly, to deny.

But the work of Baron Hume has not only done good, by thus narrowing and defining the sphere of judicial discretion—it has also done good, by superseding the authority of less sound and safe guides. Great improvements in the department of criminal law have been made since Baron Hume's work was published; views more reasonable, liberal, and humane have been adopted on many subjects, and the increased intelligence and influence of the middle classes, have led to the admission of principles, and the recognition of rights, which were then denied or disregarded. But Baron Hume's views, on questions affecting the practical administration of criminal law—defective and erroneous as in many instances we think they were—were still in advance of the writers who had preceded him, and to some extent of the age in which he passed his own early life, and during which he laid up the stores of knowledge, and gathered the materials of precedent for his great work.

It is much to the honour of Baron Hume, and has been of inestimable benefit to Scotland, that his work almost entirely superseded the authority of Sir George Mackenzie. Let those who may be disposed to think lightly of the consequences of thus dispossessing Sir George Mackenzie of the hold which he had on the confidence of the Bench, imagine, if they can, what might have been the effects of the unrestrained exercise of judicial discretion on the part of a Court, guided by the institutional authority of Mackenzie alone. He was, undoubtedly, a learned, able, sagacious, and discriminating lawyer. He possessed, if not all, at least many of the mental qualifications for a great institutional writer, and his works deserve, and still receive, the careful consideration of the student. But as a practical guide to the administration of law in a country advanced even a few steps towards constitutional government, he was unsafe, unsound, and dangerous.

The declared and open enemy of civil and religious liberty, the champion of the worst acts of the worst period of a persecuting Prelacy—the favourer, contrary to his own conviction, of Popery, when Popery was favoured by power—the avowed foe to the Presbyterian Protestantism of his own country, and the unscrupulous agent, and advocate of the arbitrary prerogative of a Tyrant—Sir George Mackenzie was, by his known principles, as well as by his whole official conduct, utterly disqualified as an authority on that branch of the law into which constitutional principles most deeply enter, and on the right administration of which, public and personal liberty chiefly depend. He maintained the soundness of the doctrine, in his day recognized by law, that an accused party was not entitled to prove any defence contrary to the prosecutor's averments. "To admit contrary probations," says he, "were to open a door to perjury," and as the prosecutor's witnesses must be as fit to prove the defence as the libel—if, after cross-examination they still proved the libel, there could be no reason for farther inquiry. Under this state of the law, the exclusion of contrary proof on the part of the prisoner was frequently enforced. In the trial of William Somerville for the murder of his mother in 1669, the accused offered to prove, by witnesses, that the woman died from another cause than any violence inflicted by him, but the Court decided that such proof could not be allowed. From this opinion, Baron Hume strongly dissents, and justly says, that "the true course to prevent perjury, is to allow full freedom of proof." Sir George Mackenzie also maintained the propriety of *torture* as a means of compelling an accused person to disclose his accomplices; and he proposed, and, with much ingenuity, urged and recommended the abolition of trial by jury in criminal cases. He not only au-

thorized and directed as Lord-Advocate, the cruel and oppressive proceedings against the Covenanters, which have covered his name with infamy; but, as if to prove that these were not, as might have been charitably supposed, the result of sudden impulse or passion—he coolly and deliberately, as an author and a lawyer, defended and vindicated them. On his authority, therefore, no less than on his character, the stain now rests. Who can forget the trial of James Mitchell, or the part which Mackenzie bore in that disgraceful transaction? The facts are indisputable; and even Sir George himself, in his own vindication, does not deny them. His defence is, that on these facts the condemnation and execution of Mitchell were just and lawful, and thus he pledged his authority as a lawyer, in vindication of his proceedings as Lord-Advocate. Mitchell was accused of having, in 1668, shot at the Archbishop of St. Andrews, and missing him, killed by mistake the Bishop of Orkney. In 1674, he confessed his crime to the Privy Council, on a promise that his life would be spared, and that confession was the only proof of his guilt. In 1677 he was tried. The confession was founded on as evidence against him. He pleaded the promise on condition of which it had been given, and maintained that the confession could not be used in violation of that promise. The Duke of Lauderdale, the Chancellor, and two members of the Council denied this promise on oath. Mitchell offered to prove it by the books of the Privy Council, which contained the promise. This proof he was not permitted to lead; the production of the books was refused, and Sir George Mackenzie, who was Lord-Advocate, has justified the rejection of the books and the admission of the confession, by his deliberate and recorded opinion as a lawyer. Mitchell was executed on the proof afforded by this confession, his counsel refusing to speak for him, for fear, as Mackenzie says, of offending the Duke of Lauderdale. This whole proceeding was approved of by Sir George Mackenzie, who, in 1678 dedicated his work on “Criminal Law” to the Duke of Lauderdale, and described him as “a man who spends one-half of the day in studying what is just, and the other half in practising what is so.”

It must be unnecessary to say more, to prove the great advantage which resulted from the superseding of the authority of Sir George Mackenzie by that of Baron Hume, an advantage heightened and made evident by the consideration of the large and uncontrolled discretion of the Court, who were necessarily much influenced by the principles of the author, recognized as the leading authority in criminal law.

But while we readily acknowledge, that Baron Hume's work has thus produced important and salutary results, and that, taken

as a whole, it is a highly instructive work, and frets his hour upon serving of careful study as an authority. Reform is now the secular authority, we are, after the diffusion of useful, and especially such an institutional work of religious knowledge, we see mentous a subject. and the check to sedition. It is no undisputed, and generally being, what it provides in the political tendencies of the present. We think it one of the defects of his work, guide in the principles pronounced in a period of great party the earnest principles pronounced in a period of great party, principles received and recorded as fixing grave and monotonous of constitutional law. We have much cause for regret that the dicta of Baron Hume on the subject of sedition, supported as they are by the authority and precedents of former times, like 1675 or 1793, are not now acknowledged, and could not now be enforced.

These deficiencies—for such, notwithstanding our high respect for Baron Hume's Commentaries, we think them—have not been supplied by the subsequent work of Mr. Alison, an accomplished and able gentleman, who has gained much distinction as an agreeable writer and historian, but whose fame can not securely rest on his authorship as a criminal lawyer, and who was by no means qualified to supply the deficiencies or correct the errors of Baron Hume. The Reports of Criminal Trials by Mr. Syme, closed in 1829: those by Professor Swinton and Mr. Broun, in sequel, for the accuracy and ability of which the profession and the public are much indebted to these gentlemen, commenced in November 1835: and, with the exception of a few cases, reported separately, these Reports and Mr. Alison's work constituted the whole available addition to our criminal law, since the completion of the last edition of Baron Hume's Commentaries.

Mr. Bell's "Supplement" to Hume's work, is not intended as a systematic treatise, and contains scarcely any original speculation or exposition. It takes up the state of the law as at the date of Baron Hume's last edition, and, as its title implies, it "supplements" his work by giving, according to his arrangement, and with precise reference to his text, "a comprehensive notice of every recent extension, alteration, or confirmation of the doctrines delivered, or resolution of the doubts expressed by that author." The many new statutes which have passed, and the multitude of decisions which have been pronounced, with the new rights, relations, and exigencies which have arisen in the course of the wondrous progress of this country during the last twenty years, rendered the task of Mr. Bell not merely one of great labour, but one requiring accuracy, judgment, and discrimination in no ordinary degree. To this task he has addressed

himself with energy and perseverance, and we are happy to say that his efforts have been crowned with remarkable success, and universal approbation; and accordingly his work, notwithstanding its recent date, is already recognized as a valuable authority. Nor is this surprising, when it is considered that in addition to his own industrious personal researches in the ordinary sources of authority, he had the advantage of consulting the note books of the Lord Justice-General, Lord Mackenzie, and Lord Moncreiff; by collation of whose notes with the published Reports, and with the indictments and records of Court, a complete, accurate, and comprehensive digest of decisions, during the period referred to, has been presented to the public. Every day's experience proves the importance and usefulness of this work, to which great additional value attaches, in consequence of the access which Mr. Bell had to the notes of the Judges, particularly of the Lord Justice-General—the record of the faithful labours of so many years usefully and honourably spent in the high judicial situation of Lord Justice-Clerk.

As we have already observed, there has been in many respects great improvement in the criminal law of Scotland since the date when Baron Hume's work first appeared. Amendments of much practical utility have been introduced, and sound and salutary principles, denied or overlooked in a darker or more servile age, have received recognition and effect.

One of the greatest—in our opinion by far the most valuable—of these improvements, is the selection of the jury by ballot from the list of assize, and the right of peremptory challenge, introduced by the Act of Parliament, 6th Geo. IV., cap. 22. It is well that the law and practice of Scotland, before the date of this Act, should from time to time be recalled to our recollection, in order that we may appreciate aright the value of the change which the Legislature then introduced. According to the previous law and practice, the Judge, having before him the names of the forty-five persons forming the assize, named, or selected, or in the emphatic words of Erskine's *Institutes*, "picked out" the fifteen Jurymen to try the case; and in regard to the Jurymen so selected, the prisoner had no right of peremptory challenge, but only a right to state special objections of such a limited and specific nature, as practically to be of no use to him. This mode of appointing the Jury (which few would now approve of or wish to resume,) was in its day, earnestly and powerfully defended by those whose dread of innovation blinded them to the abuses of all existing institutions, and the attempt of Mr. T. F. Kennedy to introduce the Ballot for the Jury, and the right of peremptory challenge, was resolutely resisted by Sir William Rae and the Tory party of the day.

It is stated by Mr. Alison, in the second volume of his work on Criminal Law to which we have already adverted, that "as this practice gave rise to many complaints, and much misrepresentation, a remedy was provided for it by Sir W. Rae." In this passage it is insinuated, that the objections to the system of the selection of the Jury by the Judge, and to the absence of all right of peremptory challenge, were founded on "misrepresentation," and that of the abuse, if it was so, Sir W. Rae was the patriotic reformer.

We are quite certain that no argument can, in our day, be necessary to satisfy any intelligent man, that the selection of the Jury by the Judge was objectionable in theory, implying an unconstitutional power, and imposing a very painful and invidious responsibility on the Court, and that, therefore, in so far as the complaints alluded to by Mr. Alison, were preferred against the principle or theory of the system, they were not founded on misrepresentation. But in this instance, as in all others, it was proved, that a system unsound in principle, was also injurious in practice. Its very existence was destructive of the purity and serenity of atmosphere, which ought to prevail in a Court of Justice; it exposed the judge to misconstruction—the jury to temptation—the accused to injustice—and the law to suspicion. If it were only to awaken a more lively gratitude for the better law which now prevails, it is worth while to meet Mr Alison's charge of misrepresentation, and illustrate, shortly, the working of the former system by one or two examples of its practical operation.

In the notorious prosecution of Presbyterian ministers in the beginning of the seventeenth century, for resisting the attempts of James I. to restore Prelacy, the conviction of several persons was obtained by an intrigue on the part of the Lord-Advocate of the day, Sir Thomas Hamilton, who afterwards avowed in a letter to the king, which has been preserved by Lord Hailes, that he had procured the conviction, by inducing the Judges to pack the jury with "their own particular and private kinsmen and friends," and then to resolve their doubts by "*dealing with them without scrupulosity or ceremony.*" This is one of the few instances of frank acknowledgment of a practice which, in bad times, must have been very common, and which, from the terms of the acknowledgment, does not seem to have surprized or startled any of the parties concerned.

Many similar cases occurred during the fearful period of twenty years which preceded the Revolution of 1688, when, under the cloak and forms of law, was covered much of the cruel tyranny perpetrated against the Covenanters. Many murders—for they deserved no other term—were committed under form of

law, and by judicial authority, and even under the sanction of verdicts by juries—but by juries selected for their servility or their known partizanship by the Court.

But, taking an instance from a more recent age, who does not remember the case of Stuart of Ardshiel, tried at Inverary in 1752 for the murder of Campbell of Glenure? The accused, a member of a clan at feud with the Campbells, was tried before the Duke of Argyle, then Lord Justice-General, for the murder of a Campbell. This Judge, the chief of a hostile clan, selected the fifteen jurymen, and Stuart was tried and convicted by a Jury, consisting of eleven Campbells, and not one Stuart. Whether Stuart was guilty or not, it is now very difficult to determine, and not necessary for our present purpose to inquire. It is impossible to doubt, that he was unfairly tried. If he was innocent, he was murdered under sanction of law, and if he was really guilty, and so proved by the evidence, this only the more clearly evinces the injurious effects of the system on which the jury were appointed, since, on that supposition, the sympathy of public feeling was shifted to the side of the guilty, and the minds of men were led to dwell, rather on the mockery of justice and the outrage on decency, exhibited at the trial, than on the evidence of the guilt of the accused.

To come down still nearer to our own day. In the trial of Thomas Muir for sedition, in the year 1793, the fact of his being a member of the British Convention, and the illegality and seditious character of that convention, was part of the charge against him, and of course was to be determined by the jury on the evidence laid before them. The Lord Justice-Clerk, (Braxfield,) presiding at his trial, selected, or to use the words of Mr Erskine, “picked out” the fifteen jurymen. It was objected by the prisoner, that these gentlemen so picked out by the Court, were members of a society, called the Goldsmiths’ Hall Association, which had prejudged his case, by erasing his name from their books, as a person guilty of sedition, and that it was impossible to expect from them, a fair trial of one whom they had already condemned. This objection was unanimously, and without hesitation, repelled by the Court, and every man on the jury which convicted Muir, sat there in spite of the objection, and was, we believe, actually a member of the Goldsmiths’ Hall Association. If the Lord Justice-Clerk did not pick out these gentlemen *because* they were the pledged opponents of the prisoner, he had a strange luck in discovering them. One of the gentlemen selected, stated that he was a servant of Government, “that his mind felt scrupulous, he laboured under much anxiety, and begged leave to decline being a jurymen.” His scruples were disregarded, his declinature met with

the same fate as the prisoner's objection—it was at once repelled, and he was obliged to act as a jurymen. In Gerald's case it was objected to one of the jurymen selected by the Court, that "he had declared he would condemn any member of the British Convention." Gerald was tried chiefly for what he said and did as a member of that Convention; he stated, that a distinct declaration had been made by a gentleman picked out as a jurymen, that "he would condemn any member of the British Convention," and he maintained that this fact ought to be a disqualification of that jurymen. The objection was unanimously, and without hesitation, repelled by the Court. Nor was this all. The Lord Justice-Clerk, in repelling it, said, referring to the preconceived determination to condemn, "I HOPE there is not a gentleman of the jury, nor any man in the Court, who has not expressed the same sentiment."

Of the gentlemen selected as the jury in Muir's case, all were known to be strongly opposed to the accused, and to have deliberately prejudged his case, and a majority were landed proprietors; and to that jury, so selected and so composed, the Lord Justice-Clerk, in a charge which we cannot even now read without horror, thus expressed himself:—

"Mr. Muir might have known that no attention could be paid to such a rabble. What right had they to representation? He could have told them that the Parliament would never listen to their petition—how could they think of it? A government in every country should be just like a corporation; and in this country it is made up of the landed interest, which alone has a right to be represented; as for the rabble, who have nothing but personal property, what hold has the nation of them? What security for the payment of their taxes? They may pack up all their property on their backs, and leave the country in the twinkling of an eye, but landed property cannot be removed."

It is not surprising, that this address to a packed and prejudiced jury, led to the conviction of the accused.

We have been reluctantly compelled to open these dark pages of the history of our Scottish Courts, in order to illustrate the practical operation of the mode of appointing juries which then, and till recently, prevailed. We do not wish to dwell on—we can scarcely trust ourselves to speak of—the many revolting and lamentable features of these trials for sedition, which, as soon as the panic under which they occurred had subsided, justly awakened feelings of horror, indignation, and alarm in regard to the administration of criminal law in Scotland. We must not be understood as concurring in the views, or approving of the proceedings of the persons then convicted. On the contrary, we think that some of their views were erroneous, and

others extravagant, and that their conduct was generally indiscreet; and we are satisfied that the course which they adopted of defending themselves in person, and bringing forth prominently their extreme opinions, was most unwise. If they had accepted the proffered services of Henry Erskine as their Counsel, it is not impossible that a verdict of acquittal might have been wrung even from a jury of opponents selected by the Court. But whatever may have been the indiscretion or even the impropriety of their conduct, they were unfairly tried, and unjustly punished, and to every lover of his country the trial and conviction gave great reason for alarm. Their cause became the cause of every man; for none could feel secure in his rights or liberty under such a tribunal, and all confidence in Courts of Justice was extinguished, when the law, which should have been the bulwark of each man's right, became the dreaded instrument of oppression. Any citizen, however peaceful, temperate, and respectable, if only he held and expressed political opinions strongly opposed to the Government of the day, was then in danger of being accused of verbal sedition—tried by a selected jury predetermined to condemn him, and whose predetermination was approved of by the judge who selected them—convicted of a new crime—and condemned to an unprecedented punishment.

These days have passed, never we trust to return, but certainly the complaints made in regard to the former system of selecting juries do not appear to have been founded on "misrepresentation." But if Mr. Alison's charge of "misrepresentation" in regard to the former practice is groundless, his ascribing to Sir William Rae the merit of providing a remedy, is absolutely ludicrous. The truth is, that Sir William Rae stoutly resisted the attempts of Mr. T. F. Kennedy to introduce this most wise and necessary reform. He was actively and prominently opposed to it. He admired the old system, and exerted all his efforts to preserve it. He thought all change uncalled for, and the change proposed hazardous and inexpedient. If he had had his own way, the naming of juries by the judge, and the absence of peremptory challenge would have been the law and practice still, and the measure, of which Mr. Alison gives him the credit, never would have passed into a law. He not only expressed his opinion as Lord-Advocate, and as a Member of Parliament, against the measure, but he stirred up the freeholders of the counties, and the corporations of the burghs of Scotland, to petition Parliament against it. He actually sent them a circular signed with his own name, stimulating them to opposition, and advising them as to the mode of making that opposition effectual. The consequence of this government-prompting was that the docile freeholders and submissive corporations did, with few exceptions, petition against

the proposed change, and dwelling on the grateful themes suggested to them by Sir William Rae, of respect for our national institutions, and especially the Justiciary Court, they expressed themselves perfectly contented with the existing state of the law. All this was quite natural, just what was to be expected from the temper of those times, and the nature of the petitioning corporations. Sir William Rae's opposition to a proposal to limit the power of the Court, and guard the rights of the accused, was not surprising, and we should not now have adverted to it, were it not that Mr. Alison has thought fit to ascribe to the leading opponent of the measure, the credit of passing it into a law, thus decking him not merely with borrowed plumes, but with plumes torn from those with whom he waged open war. To borrow a happy expression lately used by Lord John Russell in reference to the praise claimed by Sir Robert Peel for the removal of Roman Catholic disabilities—"To accord such praise is to ascribe to the general who capitulates the honour of having taken a city."

The change, however, though not obtained by misrepresentation, and not in our opinion ascribable to the patriotism of Sir William Rae, has been of incalculable advantage. The improved system has been well and honestly worked. No one now ventures to question or suspect the perfect fairness of the constitution and the proceedings of Scottish Juries; the fullest confidence is reposed in their purity, integrity, and good sense, and their verdicts generally gain the concurrence, and always the respect of the public.

It is right to add, and looking to the recent experience of a State Trial before an Irish Court and an Irish Jury, it is most satisfactory to be enabled to add, that in Scotland no public prosecutor would attempt to proceed with his case before a jury which, whether by error or fraud, by accident or design, he knew to be unfairly constituted.

Another great improvement introduced since the first appearance of Baron Hume's work, is the extinction of those merely technical and formal objections, under cover of which many guilty persons, against whom the evidence was conclusive, escaped conviction, and were thrown loose upon society. It was once stated strangely enough by Mr. Alison, as a recommendation of the criminal law of Scotland, that "more than one half of the acquittals of prisoners tried in the Court of Justiciary, originated in these technical niceties which are unknown in the English practice." The statement when made in 1824 was probably correct, but we can ascribe to nothing but a blind devotion to existing Scottish institutions, the complacency with which the writer compares this part of the administration of the law of

Scotland with that of England. We cannot think the fact otherwise than most unfortunate and discreditable, and we rejoice that this distinctive peculiarity of our Scottish system has now disappeared. The forms of law should be the aids, not the manacles of justice. Whatever rule of formal procedure is a test for the discovery of truth, or a check on the concoction of falsehood, or a reasonable security against deception, or a legitimate protection to the substantial interests of the accused, ought to be maintained and firmly enforced. But mere quibbles and quirks, objections to the executions of citation and the designation of witnesses, taken after the jury were sworn, and the prosecutor's case had been perilled on the evidence which he could then produce, and leading, if sustained, to the shutting out of the truth and the acquittal of the guilty—these could only bring discredit on Courts of Justice, and destroy that public confidence and respect which is the basis of the legitimate authority, and the salutary administration of the law. It is well and wisely said by Sir Matthew Hale, that—"The forms and prescripts of laws were not introduced for their own sakes, but for the sake of public justice, and therefore when they become insipid, useless, impertinent, and possibly derogatory to the end, they may, and must be removed."

It seems to have been formerly thought that the scrutiny of executions of citation for the discovery of technical objections was an improving exercise for the young advocates practising in the Justiciary Court, and it is stated by Mr. Alison that these gentlemen made "ample amends" for their inadequacy to the task of addressing a jury in a difficult case of circumstantial evidence, by their "accuracy in scrutinizing the writs or executions lodged previous to the trial, and their ingenuity in getting up technical objections." Here, again, we are constrained to differ from a writer so devoted to Scottish practice, and so enamoured of legal technicalities, that he finds occasion for pride and satisfaction even in the defects of the system. We would deprecate, not recommend, the occupation of laboriously "getting up technical objections," as a preparation for professional success. The time and labour might be much better spent; nor is this all, they are not merely wasted, but misapplied. The tendency of such a pursuit is rather to contract and stiffen than to enlarge and invigorate the mind. No amount of success in detecting, accumulating, and maintaining technical objections, could ever qualify a man to discharge the high duties, and win the enduring honours of the legal profession. The lawyer of nobler and wiser ambition studies his profession thoroughly, not that he may twist himself pleasantly in its complicated forms, and rejoice amid its embarrassing technicalities, but that he may imbibe the spirit, and grasp

the philosophy of jurisprudence, that he may extract the ore of the principle from the rubbish of the practice, and be enabled by the storing of professional materials to ply with success the honourable vocation of vindicating the rights, and advocating the interests of humanity. He makes himself acquainted with forms, that he may not be distracted by their complication, when obliged to use them; but he seeks for principles as for truths, and confines not his inquiries to his own profession, but feels that every hour employed in acquiring knowledge, in the pursuit of ethical or natural science, in the cultivation of classical and modern literature, in the formation of a high standard of morals, and a pure standard of taste, in strengthening and maturing the powers of judgment, memory, and expression, has been no less profitably than pleasantly spent.

In illustration of the manner in which this technical nicety tended to defeat the ends of justice, we may mention that under the former system, criminals have escaped conviction on such grounds as these;—because though the list of witnesses was duly signed by the Advocate-Depute, the copy served on the prisoner did not set forth the signature; because the messenger who cited the witnesses had not the warrant for citation in his hand, or in his pocket, but had left it at the office;—because the name of one of the witnesses to citation, was written on an erasure—and on other grounds equally trivial.

This great abuse has been removed by the Act 9. Geo. IV. cap. 29, commonly called Sir William Rae's Act—for which, as well as for many other such improvements in the law, the country is indebted to that gentleman. According to the provisions of this Act, it is not now competent to state any objections founded on the want of citation or on the irregular citation of jurors or witnesses; and all objection to the designation of witnesses in the list appended to the indictment must now be stated before the jury are sworn, when, if the party objecting has been really unable to find the witness, and been misled by the defective or incorrect designation, the Court are empowered to give what remedy may be just. In such a case the objection, even if sustained, can now only delay the trial for a short time, and cannot frustrate the ends of justice. Accordingly acquittals on grounds so purely technical and plainly trivial as to offend the moral sense, and shake the confidence of the public, do not now occur, and experience has proved the wisdom of this salutary reform.

Another recent improvement is the admitting and enforcing the evidence of all near relations except husband and wife, and the abolition of the absurd privilege of "option," which was formerly allowed to parents and children. The rejection of the

testimony of near relatives, like many other forms of practical injustice, was defended on the ground that the admission of such evidence might lead to perjury, as if the risk of perjury could justify the exclusion of truth. The "option" had really nothing to recommend it; but was at once mischievous and ridiculous. Till very lately a child could not be *compelled* to give evidence against a parent, nor a parent against a child, but they were *permitted* to do so if *willing*. They had the option of giving, or refusing to give, evidence, and the result of this was, that in some cases where the witness, if examined, would swear truly, but the truth, if disclosed, would be unfavourable to the accused, the truth was withheld from the jury; in other cases where the witness, whether parent or child, *wished* to obtain a conviction, the evidence, true or not, was readily given, though not the more credible from the unnatural exercise of a choice to depone. This right of option it was supposed could not be exercised by young children, and accordingly no child under the years of pupillarity could be examined as a witness against a parent, except on a charge of violence to the child itself.

The ends of justice have been repeatedly frustrated by this state of the law. A daughter of twenty years of age, who had witnessed the murder of her sister's infant child by that sister and her mother, was adduced as a witness on their trial. She availed herself of the option then allowed her by law, and declined to give evidence against her mother. This exclusion of the truth led to the acquittal of both prisoners. A still more striking case occurred at Glasgow in 1824. Two children, under twelve years of age, were eye-witnesses of the murder of their mother by their father. Peeping through a window from without, they saw their father seize their mother, and deliberately cut her throat. So fearful a sight made a deep impression on their minds. They clearly remembered, and would have distinctly narrated in the presence of the jury, the details of what they had seen. Confirmed as their statement would have been by the fact of their mother's death by violence when alone with her husband in the house, their evidence would have been conclusive. But their testimony was inadmissible in the existing state of the law, and accordingly was rejected by the Court; they were too young to exercise the option allowed by law, and this direct and resistless evidence of the guilt of the accused, was excluded from the consideration of the jury. In that particular case, the other evidence, partly direct and partly circumstantial, was sufficient to insure the conviction of the murderer; but it might easily have been otherwise, and the just punishment of an atrocious criminal might have been prevented by the unreasonable rule of

law which excluded the testimony of two eye-witnesses, whose evidence in the case of any other but their parent, would have completed the proof. This state of the law—which, like all other abuses, had in its day, and till very recently, no lack of advocates and eulogists—has now been altered; and, by a recent statute, (3 and 4 Vict., cap. 59,) it is provided that no witness shall be disqualified by any degree of relationship except that of husband and wife, and that it shall not be competent to any witness to decline to give evidence on account of such relationship; thus taking away the option in the case of parent and child, and opening the door for admitting to the jury the evidence—often important, and sometimes conclusive—which was previously excluded from their view. This amendment of the law is of great practical utility; and its value is not diminished by the acknowledged fact, that partial and objectionable evidence is occasionally received. The credibility of evidence is to be judged of by the jury. The admission of testimony in which a bias is probable or certain, increases the necessity of caution and discrimination on the part of the jury. But the exclusion of testimony is a bar to justice; and now that all persons, with the single and necessary exception of husband and wife, are admissible witnesses, the law is placed on a safer and sounder footing.

Another alteration which, we are sure, will be viewed as an improvement by all who attend to the moral guilt implied, or the dangerous consequences involved, in the violation of personal trust and confidence, is the gradual obliteration of the lines of distinction between theft and breach of trust. It appears to have been at one time the law, that a stranger who walked into a counting-house and carried off a bag of coin, or a bundle of bank notes, committed an offence not only different in character, but higher in degree, than that committed by a paid and trusted clerk in the same counting-house, who violated the trust reposed in him, and abstracted, and appropriated to his own purposes, the property of his kind and confiding employer. The former act was termed “theft,” and punished always severely, and, if the sum taken was large, often capitally. The latter was termed “breach of trust,” in no case a capital crime, and always treated more leniently than a theft to the same amount. A common carter, or porter, who takes a box committed to his care was supposed to commit theft: a regular carrier, paid for taking care of the box, was supposed to commit only breach of trust if he appropriated it. The servant of a farmer, sent with a parcel of bank notes to the landlord, was considered as committing theft if he appropriated them: the steward of the landlord was supposed to be guilty of breach of trust only, if,

having received the whole rents of the estate from the tenants, he absconded with the money. Nor was this distinction merely nominal. The punishment of the act of abstraction, when committed by a party intrusted, was uniformly less severe. The breach of trust was really treated as a circumstance diminishing the guilt and mitigating the punishment of the abstraction.

The recent decisions of the Court have now, however, nearly wiped away this distinction. The appropriation by a watch-maker of a number of watches received by him at different times to be repaired, has been decided to be theft; a clerk employed to discount bills, and apply the proceeds for behoof of his employers, has been convicted of theft for appropriating the money; a person finding a pocket-book with the owner's name in it, and appropriating instead of restoring the same, with its valuable contents, has been held guilty of theft; the appropriation of his employer's money by a clerk in a counting-house, or a teller in a bank, has now been authoritatively declared to be theft, and has been treated and punished accordingly. And so it plainly is, and a theft of a serious description; for to us it appears that the very circumstance of trust, which used to be considered as mitigating, does truly aggravate the crime, by introducing into the act an element which at once increases its moral guilt and its social danger. We would wish to see the principle of this improvement carried a step farther—to see breach of trust recognized as a proper aggravation of the crime of theft, so that a person who, when trusted, steals from his employer, shall be indicted for “theft, especially when committed by means of breach of trust,” and be punished for an offence aggravated by the relation in which he stood to the party whom he wronged.

On the system of Scottish Criminal Law thus reformed, improved, and adapted to the circumstances and exigencies of modern times, we now look with veneration, confidence, and pride. We venture fearlessly to challenge for it comparison with any other system in the world. We do not, indeed, ascribe to it the superior character, intellectual, moral, and religious, which distinguishes the peasantry and working classes of Scotland. This we rather trace to the habits of reflection, and the prevalence of earnest religious feeling, created by their Bible education, and their simple and solemn worship. But we do ascribe to the practical and felt excellence of the system of criminal law, the universal and hearty confidence that justice *will be done*, and that justice *is done*, which pervades all classes, and without which, amid a people too acute to be deluded, and too firm to be oppressed, the law could not maintain its authority.

The returns, prepared from minute and accurate reports from all parts of Scotland, of the number, progress, and result of all criminal prosecutions, whether in the High Court of Justiciary, at Circuit, or before the Sheriffs, or local Judges in each county, contain the clearest and most satisfactory proof of the excellence of the system, both as regards the amount of convictions, and the just and constitutional procedure in the conduct of each case. In these returns, regularly and periodically furnished to the Lord-Advocate, the date and manner of each step of procedure is recorded—the apprehension of every party accused, his examination, committal, liberation on bail, or refusal of bail, indictment, desertion of diet, or adjournment of case, his trial, conviction, or acquittal, sentence, and punishment—all are registered, and any point in regard to them, can at once be ascertained with certainty.

On an examination of many of these returns, with the details of which we shall not trouble our readers, it has been ascertained that the proportion of convictions to prosecutions in Scotland, was in 1823, as six to seven, that is, one out of every seven persons prosecuted escaped conviction; and in 1840, the proportion was nearly as eleven to twelve, that is, only one out of every twelve persons prosecuted, now escapes conviction. The returns for 1840 are before us, and we shall take them as an example—

The exact numbers in 1840 were,

Persons brought to trial in Scotland,	. . .	3213
Convicted,	. . .	2909
Outlawed for non-appearance,	. . .	86
Found insane,	. . .	7
		<hr/> 2952
		<hr/>
Leaving acquitted,		261

of whom 219 were dismissed on verdicts of “not proven,” and 42 on verdicts of “not guilty.”

This is the result of the tabular returns of prosecutions for the year 1840, all over Scotland, and in all the Courts, whether supreme or local. But in the High Court of Justiciary, and at Circuit, the proportion of convictions is still greater. At the circuits held in the city of Glasgow, where the number of cases is necessarily large, it generally happens, that out of 60 or 70 cases, and nearly 100 criminals, there are not above three, four, or five instances in which convictions are not obtained; and we ourselves are aware, and indeed have the returns now before us, of several occasions on which every charge made at a Glasgow circuit was substantiated to the satisfaction of intelligent

juries, and convictions were obtained in every case brought to trial. With such certainty does justice follow on the heels of crime, and with such judgment and discretion is the power of prosecution exercised.

In England, it appears, that in 1823 the proportion of convictions to prosecutions, was nearly as two to three, that is, about one out of every three persons prosecuted escaped conviction, and in 1843 the proportion was nearly as three to four, that is, one out of every four persons prosecuted now escapes conviction; or, in other words, this large proportion of persons charged with crime, are either wrongfully accused or improperly acquitted.

The great principle which gives such practical efficiency to the criminal law of Scotland, is the principle of public prosecution. Crime is, in Scotland, recognized and treated as a public wrong, and the prosecution of it is, therefore, not left to the caprice, or partiality, or resentment of individuals. The Lord-Advocate of Scotland, a high officer appointed by the Crown from the Bar, amenable to public opinion, and responsible to Parliament, is, in the Sovereign's name, the public prosecutor at the public expense, of all crimes, and over all Scotland. When in Scotland, he generally conducts in person the prosecutions before the High Court of Justiciary; and in his absence, the duties are discharged by the Solicitor-General and four advocates-depute appointed by the Lord-Advocate, and for whom he is responsible. In the inferior Courts, the prosecutions are conducted by public officers, called Procurators Fiscal, whose proceedings are, throughout, directed and sanctioned by the advocate-depute attached to their respective districts, and for whom, therefore, the Lord-Advocate is, also, ultimately responsible. By an admirable system of practical arrangement, the state of the whole country from Shetland to Galloway, is kept under the notice and the charge of the public prosecutor. Every crime, above a mere police offence—every step in the procedure of investigation, prosecution, and trial—every accident on a railway, road, or navigable river—every case of sudden death, with the slightest suspicion of violence—all are regularly and accurately reported, and brought under the consideration of the Lord-Advocate, or of a Deputy, for whom he must answer. As the Lord-Advocate cannot be compelled to prosecute, the prosecution by a private party, with concurrence of the public prosecutor, is lawful: and the Lord-Advocate cannot refuse his concurrence, without, if required, establishing his reasons for doing so, to the satisfaction of the Court. But so great is the public confidence in the Lord-Advocate, that private prosecution is almost unknown; and it may be truly said, that all crime over the whole country, is investi-

gated and prosecuted at the public expense, and at the instance of the public prosecutor. The consequence is, and is felt to be, that justice cannot be withheld from the poor, or evaded or resisted by the powerful.

This is, indeed, a very extensive, and, as it might be thought, a very alarming power, to intrust to any officer appointed by the Crown. We admit it. We marvel not at the constitutional objection entertained to it by our friends in England. We acknowledge, that in evil times, and in the absence of great popular checks, the power of the Lord-Advocate has been, and might again be, arbitrarily, and partially, and oppressively exercised. But so great appear to us the advantages of public prosecution, such the security against the impunity of powerful offenders, and the oppressive prosecution of the poor and helpless—and such the practical efficiency in securing the punishment and repressing the commission of crime, that without shutting our eyes to the constitutional objections, which we fully appreciate, we are disposed to think that they are outweighed by the excellence of the institution, and that in the progress of society, and the advance of popular influence, a degree of power may now be safely intrusted to the Lord-Advocate, which would have been dangerous in a less enlightened and less liberal age. If there is to be a public prosecutor, he must possess extensive powers, and a large discretion—he must be responsible to Parliament, and the Government must be responsible for him. As an antidote, therefore, to the powers, we would proclaim and enforce the responsibilities of this high office, and guard the exercise, instead of limiting the extent of its authority. The Bar, the Press, the Public, are no inconsiderable checks on the conduct of a public prosecutor, and, in his place in Parliament, he must, if called on, meet every charge, and defend every act, before an assembly, where the meanest subject will ever find a friend. Responsibility to Parliament is not now what it was formerly, a mockery in itself and a pretext to evade all other accountability. It is real, substantial, serious, and capable of practical enforcement in every instance of injustice, since the returns, kept at the Crown Agent's office in Edinburgh, afford the means of ascertaining, precisely, the whole course of procedure in each particular case.

It is certainly to be regretted that so much of the political, and even strictly *party* work of the government is committed to the Lord-Advocate. He is indeed the guide, the agent, and administrator of all direct political management in Scotland; and in addition to the personal patronage attached to his office, he is, or is believed to be, the adviser in the distribution of all government patronage in Scotland. That these extensive political powers,

this great party zeal and party activity, and this storehouse of good things ever at command, with the immense influence which must accompany them, should all meet in the person of the public prosecutor, who ought to be, of the whole community, the farthest removed from the feelings, and the prejudices, and the influences of party connexion, is certainly anomalous and startling on principle, and if possible, or as much as possible, it ought to be remedied.

It is said, and we admit the force of the remark, that the Lord-Advocate must be appointed by the Crown in order that Government may be responsible for him; that it is desirable at least, if not indispensable, that he should have a seat in Parliament, to ensure his personal responsibility, and enable him to explain or vindicate his conduct; and that thus appointed, and thus placed in Parliament, he must have party feelings, and give party votes. This may be all very true. We shall not at present dispute it; though there are many strong arguments in favour of the appointment for life of a public prosecutor removed from party conflict, and party influence, and party temptations. But, even assuming this, we do not see any necessity for his being the great distributor of Government patronage in Scotland; and we think it quite practicable, and very desirable, to remove in some measure this, the greatest, if not the only defect, in the system of public prosecution, by limiting the patronage, direct or indirect, of the Lord-Advocate, exclusively to those situations immediately connected with the discharge of his official duties, such as the Solicitor-General, the Advocates-Depute, and the Crown-Agent, and by relieving him of the irksome, and, for the public prosecutor, the unseemly task, of adjusting all the party arrangements and electioneering management in Scotland.

We intended to have offered some suggestions for the amendment of the law on a few points of practical importance, but we can only briefly explain one or two of them.

We would recommend an extension of the power and facilities now allowed to prisoners of protecting themselves from protracted prosecution by forcing on their trial. The *Habeas Corpus* Act, esteemed in England the great bulwark of personal liberty, does not apply to Scotland; but accused persons in Scotland are supposed to be adequately protected from undue imprisonment by the Act of Parliament 1701, cap. 6. This Act does undoubtedly contain salutary and valuable provisions, and does afford to the accused a very considerable and important protection against unjust or protracted imprisonment;—but since it is in this country the only statutory bulwark of personal freedom, and since the cause of order, no less than of liberty, the interest of

justice, no less than the protection of innocence, is involved in the expediting of criminal procedure and the limitation of imprisonment before trial, it is desirable to ascertain whether the Act of 1701 is not susceptible of amendment, and may not be extended with advantage.

The provisions of this Statute in regard to the apprehension and imprisonment of accused parties, and to the recognition, extension, and enforcement of the right of bail, are of great importance and value. But the provisions for enabling a prisoner to force on his trial, appear to us to be inadequate. The Act provides that every prisoner in custody in order for trial, whether for capital or bailable crimes, shall be entitled to apply to any judge competent to try him for the offence charged against him, for letters of intimation to be issued within twenty-four hours, addressed to the prosecutor, ordaining him to fix a diet for trial within sixty days after intimation, and that if that period elapses without a diet being fixed, the prisoner is entitled to instant liberation. If a diet be fixed by serving an indictment within the sixty days, the prosecutor must bring that indictment to a conclusion within forty days immediately following, or the prisoner is entitled to liberation. No second indictment can be served after intimation under the statute; but new criminal letters may be raised by the prosecutor before the Court of Justiciary, on which the accused may be apprehended and brought to trial within forty days of the date of his incarceration on these new letters. If this is not done, the prisoner is entitled to a complete and entire discharge, and to the judgment of the Court declaring him, in terms of the statute, to be "for ever free from all question or process for said crime or offence."

On these provisions we remark, in the first place, that according to the construction put upon the statute by the Court in the case of *Macdonald and Young*,* and in some other cases, it seems at least extremely doubtful whether it affords any protection whatever to an accused party who is not in actual custody, but under bail to appear and answer to a criminal charge. An opinion favourable to the extension of the statute to a person on bail, was, in the case of *Macdonald and Young*, expressed by Lord Moncreiff, but it does not appear that the rest of the Court concurred in that opinion, and the authority of Baron Hume and Mr. Alison† is against such extension. Many powerful arguments might, we think, be adduced in favour of the constraction of the

* 18th June, 1832.

† *Hume*, vol. ii., p. 104. *Alison*, vol. ii., p. 184.

statute, which is understood to have been adopted by Lord Moncreiff, the great weight and value of whose opinion, especially on a question of constitutional law, must be universally acknowledged. But, without entering into this question of construction, or nicely inquiring whether it must be held as settled that the protection of the statute is limited to persons in actual custody, we venture to express our opinion that either by an authoritative declaration of the meaning of the existing Act, or by farther legislative enactments, this protection should be extended to persons on bail.

The hardship and injustice of excluding from the benefit of the statute all who are liberated on bail, is obvious. A person who may be, and who by the presumption of law must be held to be, innocent, has no means whatever of forcing on his trial but by submitting to imprisonment, and suffering the very evil which the Act was intended to prevent. If he applies for bail he loses the protection of the statute. A serious accusation has been preferred against him,—he has been apprehended and examined, and committed as a criminal,—after being liberated on bail he is, through the medium of the securities whose bond for his appearance is received, constructively, though not actually, in custody in order to trial. He is under charge,—he is an accused and suspected person, who may at any time be placed at the bar as a criminal. He feels himself suspected, he knows himself innocent. His family and friends, involved in the consequences, not of his guilt, but of his accusation, crowd around him, earnestly uniting with him in demanding a public trial, and in confidently anticipating a triumphant acquittal. But he has no redress. The Lord-Advocate will not consent, and cannot be compelled, to move. The more clear the innocence of the accused, the less is the probability of his being brought to trial; or, in other words, the more complete and satisfactory his vindication, the more effectually is it excluded. The charge may have been rashly made, the brand of an ignominious apprehension and committal may have been put on an innocent man with an exemplary character, a position entirely dependent on the estimation in which he is held in society, and a family to whom he can leave no heritage but a blameless example and a stainless name. Still this man, as the law is now supposed to stand on the construction of the statute, which we assume for the present to be correct, has no means of relieving himself from the charge preferred against him. It hangs over him, suspended solely on the arbitrary discretion of the Lord-Advocate. He cannot, if he wished, escape it; and though eager to refute, he is not permitted to meet it. Twenty years must pass before the prosecutor's right to bring

him to trial is lost by prescription; during all that period of suspense and anxiety he must endure the reproach of the accusation, and at the close of it he feels that he is not vindicated and justified as he would have been by a trial, but is placed on a level with the guilty, who are saved from punishment by the absence of witnesses, or the mere lapse of time. A charge by the public prosecutor carries no ordinary weight and authority with it; it is presumed to be not lightly made, and it naturally must affect, as in reality it does seriously affect, the *status* and circumstances no less than the feelings of the accused. Against the consequences of such a charge, an innocent man, though not actually in custody, ought to have the means of protecting himself. He ought to have the power of compelling within a reasonable time an abandonment or trial of the charge made by the prosecutor. The *squalor carceris* is not the only, or to a sensitive man, conscious of innocence, the most serious result of the public accusation preferred against him, and since the law has wisely provided for him a shield against the hardship of an unjust imprisonment, the same shield ought to guard him against the odium of an unfounded imputation.

But another, and a still more important extension of the provisions of this statute, seems to us to be imperatively required. At present, no accused person is within the protection of a statute, which is called the Charter of Personal Liberty in Scotland, unless he bring himself within that protection by presenting a written application to a judge competent to try him for the offence with which he is charged. This written application is stated by Mr. Alison to cost about £2, 2s., but, in practice, and when an agent is employed, it is found to cost considerably more. Many prisoners have not the means of raising this sum—many are so ignorant as not to know the meaning or the value of the right which the law allows them—and many, from shame or timidity, shrink from an application to the Court. Now, if the accused is so poor, so friendless, so foolish, or so timid, as to fail to apply in writing according to the provisions of the Act, he may languish in prison for years, for he cannot enforce either his trial or liberation. That protracted imprisonment before trial is a great evil and a great wrong, must be admitted by all. It is, indeed, the very evil which the Legislature intended to redress by the provisions of this Act. The period within which, according to these provisions, the prosecutor can be compelled to bring the accused to trial, must be assumed to be sufficient for the purposes of public justice, since, to that period, the prosecutor can be restricted in every case where the prisoner makes

written application. But to limit the protection afforded by law against a great evil and a great wrong, to those only who are wise enough and rich enough to seek that protection by judicial proceedings, is surely unjust to the poorer and less instructed portion of the accused. We can scarcely suppose that any one can defend the restriction, to a privileged few, of the constitutional remedy against wrongous imprisonment, which ought to be free and available to all, without limitation and without expense. The remedy is obvious. In the ordinary case—that is, in every case where no cause of special exception is established to the satisfaction of the Court—every accused person should, as a matter of course, and whether in prison or on bail, be placed, from the date of his commitment for trial, within the provisions of the statute. The law should do for all, and without expense, that which, on written application and for a fee, is now done for the few who apply. The prosecutor should, in all ordinary cases, be limited to the period to which he can now be limited in every instance where the accused applies in writing to the judge. Protracted imprisonment before trial ought to be considered not as a hardship which the poor must suffer, and from which only those accused persons who can afford it may purchase relief, but as a wrong from which every accused person, rich or poor, should be protected by the unbought authority of law.

We therefore think that it would be a humane and reasonable extension of this statute to declare, that no written application, and, of course, no expense, shall be necessary on the part of the prisoner, but that the period within which the prosecutor must bring to trial every person fully committed, shall, in all ordinary cases, be limited to the term to which he can be limited by application under the statute. Special cases may sometimes occur, in which an extension of time may be absolutely necessary to the ends of justice; these may be provided for by conferring on the Court a discretionary power of granting an extension on petition presented, and cause shown by the prosecutor. We are not aware of any good, or even plausible, reason which can be urged against this proposal. The time allowed by the Act must be admitted to be sufficient, because, even in the most difficult and intricate case, and when beset by the greatest perplexities, the prosecutor can now be restricted to that time; and, if any practical difficulty would be occasioned by the period for prosecution expiring, in some instances, at such a time as to create the necessity for trying the case at Edinburgh instead of at the Circuit, this may be easily obviated by a provision authorizing the prosecutor in these instances, as in the special cases already noticed, to ob-

tain, on petition to the Court, such an extension of time as may enable him to try the case at first Circuit.

We would also suggest, as an improvement in the manner of taking declarations from accused parties, that the system of continued and minute interrogation which now prevails, should be put an end to; and that the accused, after being warned in the usual manner, that what he says will be used as evidence against him at his trial, should just be asked if he wishes to make any statement. The statement, then voluntarily made, would be legitimate and satisfactory evidence against him, which is not always the case at present, when admissions not understood or intended are wrung by expert questioners, from an ignorant and unaided person. A prisoner is said to have the right to decline to answer questions. But this is a right which it is generally fatal for him to exercise; for when he does so, the examination, instead of being dropped, becomes at once more pointed and specific; a series of interrogations vitally affecting the question of his guilt or innocence are immediately put, and put the more pointedly and fatally because he has declined to answer; so as to turn his refusal to the greatest possible account, each question being followed in what is oddly enough called the "Declaration," by the announcement that "the prisoner remains silent," or "declines to answer any questions." He declares that he has nothing to declare. But that is not considered sufficient, and does not stop the examination. He is made to repeat his refusal to declare, in answer to a long succession of close and searching questions, the only object of which must be, to build on his refusal an inference or presumption of guilt. Thus, his privilege is made a snare, and the exercise of his undoubted right is perverted into a tacit acknowledgment of guilt. It is no answer to this objection, to say that an innocent person ought to have no reluctance to tell the truth, and would not refuse to answer pointed questions. Circumstances may so complicate around a person entirely innocent, that his most prudent course—the course which he is entitled to take, and which his legal advisers would recommend to him—is to reserve what he has to say till his trial. Such a reserve of explanation of his conduct being the right of the party accused, and the exercise of it not being inconsistent with innocence, it ought not to be taken advantage of, and perverted, by a system of vexatious examination, into the apparent evidence of guilt. A free and voluntary admission by the accused, either of his actual guilt, or of circumstances tending to the proof of guilt, is, in reason as in law, most important evidence; but every one at all acquainted with the practical working of our system of taking declarations, knows that the admissions there made are very rarely the result of

a perfectly free choice, and are not made in the course of a consecutive statement by the accused, but in answer to pointed, and searching, and puzzling questions, so put as to make the exercise of the right to decline to answer, as fatal as any reply could be.

The practice is so admirably illustrated by the examination of Edie Ochiltree in "*The Antiquary*," that we cannot refrain from recalling a sentence or two of the old Blue-gown's "declaration" to the recollection of our readers.

"Can you tell me now, Bailie, you that understands the law, what gude will it do me to answer ony of your questions?"

"Good? no good, certainly, my friend, except that giving a true account of yourself, if you are innocent, may entitle me to set you at liberty."

"But it seems mair reasonable to me now, that you, Bailie, or ony body that has ony thing to say against me, should prove my guilt, and no be bidding me to prove my innocence."

"I don't sit here," answered the magistrate, "to dispute points of law with you. I ask you, if you choose to answer my question, whether you were at Ringan Aikwood, the forester's, on the day I have specified?"

"Really, sir, I dinna feel myself called on to remember," replied the cautious bedesman.

"Or whether, in the course of that day, or night," continued the magistrate, "you saw Steven, or Steenie Mucklebucket? You knew him, I suppose."

"Oh, brawlie did I ken Steenie, puir fallow," replied the prisoner; "but I canna condescend on ony particular time I have seen him lately."

"Were you at the ruins of St. Ruth any time in the course of that evening?"

"Bailie Littlejohn," said the mendicant, "if it be your honour's pleasure, we'll cut a long tale short, and I'll just tell you, I'm no minded to answer ony o' thae questions. I'm ower auld a traveller to let my tongue bring me into trouble."

"Write down," said the magistrate, "that he declines to answer all interrogatories, in respect that by telling the truth he might be brought to trouble."

"Na, na," said Ochiltree, "I'll no hae that set down as ony part o' my answer; but I just meant to say, that in a' my memory and practice, I never saw ony gude come o' answering idle questions."

"Write down," said the Bailie, "that being acquainted with judicial interrogatories by long practice, and having sustained injury by answering questions put to him on such occasions, the declarant refuses——"

"Na, na, Bailie," reiterated Edie, "ye are no to come in on me that gait neither."

Such a course of examination, of which, in many instances, the

graphic description by Sir Walter Scott could scarcely be called an exaggeration, was most unfair to the accused ; and so long as a firm refusal to answer all questions is not held as a stop to farther interrogation, this unfairness is continued. The right of the accused should be recognized and protected, if it exists at all. He should either be bound to answer all questions put to him, be made a witness against himself, and be compelled, like every other witness, to disclose the whole truth—a proceeding against which our feelings of humanity rebel ; or he should be really and practically entitled to remain silent, and reserve his explanation till made for him at his trial. This can only be effected by such a change in the system as will make the declaration of an accused his own free statement, and not a succession of responses, given by a trembling, confused, unaided person, to a succession of questions put by a skilful and practised prosecutor. This change would not, in our opinion, operate as an obstruction to the investigation of crimes, or impede the course of justice. It would, indeed, diminish the quantity, but it would improve the quality, of the evidence obtained from declarations ; and it would remove another of the very few grounds of complaint which now attach to the administration of our criminal law.

We have trespassed so long on the patience of our readers, that we cannot even enumerate a few other particulars in which we think the administration of our criminal law capable of practical improvement. We should wish to see the moral guilt of offences constantly and prominently recognized ; in some cases even more so than at present. It is true, that all human law is, in one sense, repressive not retributive ; administered for the good of society, not the atonement of crime ; for purposes of protection, not of vengeance ; and that vengeance belongs to God alone. But moral guilt is essential to the constitution of crime ; and that which creates the peculiar character of public crime falling within the sphere of public law, is just the combination of moral guilt with direct social evil. Human law is indeed repressive, but repressive on moral principles comprehensively applied to the whole community, and commanding the approval of the moral sense of the governed ; and, therefore, in the right application of the repressive power of the law, the apportioning of punishment to moral guilt is indispensable to justice. We rejoice in the humane policy which has practically limited the infliction of capital punishment to the crime of murder ; while we frankly own that we do not concur with those who, in the case of wilful murder, deliberately and maliciously perpetrated, would abolish the punishment of death. We believe that, in that case, man is entitled, if necessary for the safety of society,

to take the life of the convicted murderer; and we are disposed to think, that the savage passions and depraved dispositions of man cannot be kept in adequate restraint by the dread of any inferior punishment. But in the long catalogue of offences, descending in the scale from that of murder, there are great varieties of moral guilt, and ample scope for the exercise of a sound discrimination, in which the judicial mind must be guided, not merely by an enlightened regard to the interests of society, but by a recognition of the moral character of actions according to the standard of a higher than human authority. It is for the breach of human law that man punishes. It is in the breach of Divine law that guilt consists. The two therefore must ever coincide in order to justify, on moral principles, the infliction of punishment by human law. Man cannot punish sin as such; but he is not entitled to declare any act a crime which is not in itself a sin, and he is bound to consider those acts as the greatest crimes, which, being injurious to society, involve, at the same time, the greatest amount of moral guilt. In order to illustrate this, we may remark, that such crimes as perjury and subornation of perjury, bigamy, and some of the baser and more aggravated forms of fraud, implying peculiar wickedness and depravity of heart, should, in our view, be always punished with great severity; while poaching, mobbing and rioting, in some instances and when not highly aggravated, and assault during quarrel, and by a person of generally good character, though they are offences deserving punishment, as dangerous to society and culpable in themselves, are yet less revolting to moral feeling, less indicative of moral depravity, and may be repressed by a more lenient sentence. Young men of previous good character have been transported for fourteen years, and even for life, for accession by mere presence in a mob during a period of popular excitement, and the statutory punishment which, till the Act 9 Geo. IV., might have been inflicted on persons guilty of night-poaching, was, in the discretion of the Court, transportation for seven years even for a first offence. While, on the other hand, the crime of wilful and deliberate perjury, committed with every possible circumstance of aggravation, has been sometimes punished by imprisonment; and when punished by transportation, the period has been almost always limited to seven years; and for the crime of bigamy, which we consider a very heinous sin, involving the moral guilt of perjury,—the punishment as stated by Mr Alison, is “in modern practice at common law imprisonment only.” Other instances might easily be given, but these may suffice to illustrate our position—that the moral guilt of offences, and the degree of moral principle which appears to be left to the offender, should be prominently considered and recognized in the apportioning of punishment to crime. Well-timed

lenity, when moral principle is not altogether extinguished, has saved many a youth from despair; and not seldom has all hope of the reformation of the offender been excluded by a sentence of such severity, as to degrade him in his own eyes and the eyes of others, and to sever him from the confidence of those who would have aided and encouraged his return to virtue. We are fully alive to the importance of the constitutional principle, that the law knows no respect of persons, and alive also to the danger of exchanging the solid stedfastness of law, for the more attractive, but less substantial, fabric of equitable discretion. We have, accordingly, the strongest objections to a discretionary power of creating offences, or even of inflicting a new and more severe punishment on such an offence as sedition, because of what Baron Hume calls "the exigency of the times." But the apportioning of punishment to crime, according to the moral guilt and social evil of each offence, is within the proper sphere and exercise of judicial discretion, and we think it a great practical recommendation of the criminal law of Scotland, that it is in this respect more elastic and pliant than that of England, and capable of more equitable adaptation to the circumstances of each particular offence, and the character of each several offender. The multiplication of statutory punishments to be applied with unbending uniformity to every case, whatever be its peculiarities, is not without its commendation, as a safeguard against partiality or caprice; but it precludes the possibility of that delicate adjustment of proportion between punishment and crime which commands the approval, and carries the sympathy of the public, and which frequently tends to promote the reformation of younger and less hardened offenders. The great lines of demarcation are defined in a well understood common law; but within these limits, and under the constitutional checks of a popularly elected parliament, a free press, and a vigilant and independent bar, the intermediate varieties and distinctions in the guilt and character of offenders are safely and properly left to the discretion of the Court.

ART. III.—*Tentamen Anti-Straussianum. The Antiquity of the Gospels asserted on Philological grounds, in Refutation of the Mythic Scheme of Dr. David Frederick Strauss—an Argument.*
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IN due time the English mind, better constituted than the German, and better trained, although less thoroughly furnished, will find, and will apply a remedy for the disorders which have spread as a plague over Continental theology. When that time comes—it is not yet come—a work, necessary and beneficial, will appear to have been achieved by German scholars, to which English scholars were not competent, and which, even had they been competent to it, the religious feeling, prevalent in this country, must have forbidden them to attempt. And then, too, it will become manifest, that the genuine conclusions—the true inference derivable from the labours of the German critics—even the inference or summing up of the argument which ought to be accepted and authenticated, is of that sort which would be drawn only by men such as educated and religious Englishmen are—men serious in their temper—sincere in their convictions—practical in their habits, and abhorrent of misplaced frivolity—of jargon, of fathomless abstractions—and of whatever must shock the feelings of those with whom the love of truth is ever the most powerful of impulses.

Germany, we do not deny, is herself doing something, and something efficient, for the correction or expulsion of the enormities which she has so long cherished in her bosom. Already one species of disbelief has cast out its antecedent; or, at least, the two schemes—incompatible as they are, the one with the other, have served, in some degree, to neutralize each other. The “myth” has supplanted the “anti-supernaturalism” while winning ground for an hypothesis which implies the very contrary of the suppositions that had been assumed by the Rationalists, when they, in their way, were labouring to supplant the French flippant scepticism, and to erect a system of unbelief on more solid foundations. And now, at length, the “myth,” as expounded by Strauss, has become, in its turn, the object of scorn to sound-minded men—we mean in Germany—and is yielding to a something better. Still, however, false assumptions, and an ill mood of mind—a universally diffused intellectual sensuousness, not unconnected with gross and revolting national habits, and a very insensitive moral sense

—the German obtuseness—altogether render it in the highest degree improbable, that a truly rational conviction respecting Christianity, should, within any period to which we can clearly look forward, gain footing, or become prevalent in Germany. Besides, in our view at least, that bold reality of character—that forceful following on toward whatever is great, good, and beneficial, which is the distinction of the English race, and which comports so happily with Christian motives—this quality, or this harmony of qualities, demands, as its basis, that which England enjoys, and has long enjoyed, and which Germany has never yet tasted—we mean, civil and political liberty. But before the benign and invigorating influence which this blessing diffuses can take effect, it must not merely have been obtained, but inherited also;—it must have been had, and held, and rescued, and transmitted too, through a course of time;—it is an influence that is not matured until it has passed through the loins of four or five generations of men. Before Germany can exchange her fitful pursuit of wild paradoxes for sound principles, she must not only set herself free from the thralls of a degrading despotism, but must have maintained herself in that freedom for 200 years. When at length, Germany, through a course of arduous struggles, yet to be commenced, has vanquished civil and political liberty for herself, she may say, “With a great price obtained I this freedom;” but England, meanwhile, in rejoinder, will be able to reply, “But I was born free;” and the difference is worth centuries of conflict.

Nevertheless—and let the balance be fairly righted—great changes must have had place among ourselves, before we shall be in position properly and effectively to establish a Christian belief, as opposed to, and as exclusive of, the Continental sceptical philosophy. Very extensive, unquestionably, have been the inroads of the several forms of imported unbelief during the years of the present century; nor can it be affirmed that this invasion has, as yet, been logically encountered, in any very marked or satisfactory manner. German infidelity is repressed by frowns, as incompatible with our institutions; and it is rejected by a healthy moral instinct, as impious and blasphemous; and it is held in check by native good sense, as a raw absurdity; nevertheless it has not, by any direct and legitimate means, been refuted and brought to nothing.

Far too ample for our present limits is the theme, were inquiry to be made concerning the several causes, operating among ourselves, to prevent or discourage the endeavours of those who might wish to challenge the German infidelity on its own ground. From such an inquiry we turn aside; and shall merely say, that, in thus early bringing under the notice of our readers the Tract

now to be reviewed, we are prompted mainly by the wish to awaken attention to every such endeavour to deal, in a legitimate manner, with the foreign scepticism. At the same time we shall, with the most friendly feeling, do the best we can to indicate to the able author the points at which his argument—to render it unassailable—demands much more elaboration than he has, in this instance, bestowed upon it. Dr. Dobbin announces his argument as “a discovery;” and he carries it forward exultingly, as if “a triumph” had already been decreed to him by the senate and people of Christendom. More caution, we think, should have been first used; or a tone of more modesty; or—what is better than either alone, namely—both together.

We should not hesitate to assign to our author high praise on the score of originality, and novelty too, in the line he has opened; and farther than this, we verily believe his reasoning to be, in the main, sound and conclusive; but at the same time we could, without much risk, predict the sort of treatment which himself and his tract would be likely to meet with at the hands of Dr. Strauss or his adherents. This treatment would not, we think, be logically due to Dr. Dobbin's argument; and yet in measure it might equitably apply to himself. Again we say, we think he deserves high praise, and has done a good service to truth; nevertheless, in using more leisure, he may yet better signalize his learning and acuteness.

But Dr. Dobbin shall state his case in his own way. Having referred, p. 29, to those diversities of style which are characteristic of the Evangelists, and the writers of the Apostolic Epistles, he goes on to observe, that there is one special usage, in relation to which these writers are divisible into two great classes—

“A usage,” he says, “so peculiar, that the author may justly feel surprise that it has not yet, so far as he can ascertain, been made the subject of lengthened remark from the press. While each sacred penman differs from his next neighbour in almost every conceivable form of style and expression, there is *one* particular, and perhaps *only one*, in the language of the Gospels, in which Matthew, Mark, Luke, and John, entirely correspond with each other. In this point of coincidence, the evangelists are as entirely opposed to another class, who, whatever may be their differences with each other, are of one complexion in a diverse usage; these are Paul, James, Peter, Jude, and the author of the Johannine epistles and Apocalypse. So entirely do these respective classes conform to the usage referred to, that if we confine our observation to this single feature, they constitute two volumes, most markedly distinct. Here are the evangelists on the one side, and the epistolographers on the other, no man garbed like his fellow on either side, yet every one so visibly bearing the common badge, as to identify him at once with either party.

“This peculiar and distinctive usage is that of the name by which the Saviour of men is designated in the Gospels and Epistles respectively.”

We are then presented, by the author, with two lists, exhibiting the designation usually applied to the Saviour, *first* by the Evangelists, and then by the authors of the Epistles; the former, in a large proportion of instances, employing the simple proper name 'Ιησοῦς, by which he was known and addressed during the period of his ministry among his countrymen; the latter, with as near an approach to uniformity, using the compound designation of personal and official name, 'Ιησοῦς Χριστός, and he then goes on to say—

“The name 'Ιησοῦς is thus seen to occur nearly seven hundred times in the works of the four Evangelists, as the proper designation of the Saviour of men. In the Epistles, on the other hand, it occurs less than seventy times, although the mention of the Saviour is frequent enough by other names. . . . We have just shown a use in the Gospels which is comparatively wanting in the Epistles; we are now to show a use in the Epistles which is comparatively wanting in the Gospels.”

This usage being, as we have stated, the naming the Saviour ordinarily, if not constantly, Χριστός alone, or 'Ιησοῦς Χριστός. From the author's list of passages “it will appear,” he says,

“1. That the word Χριστός alone, as a designation of the Son of Mary, occurs about *sixty* times in the Gospels and Acts, while it occurs about *two hundred and forty* times in the Epistles and Revelation.

“2. That, in the Gospels and Acts it never occurs without the article, except in three instances, in which, possibly, the absence of that particle might be accounted for upon other grounds than a change in the sense; while, on the contrary, the more common use of the word in the Epistles is without the article. The meaning of the word, however, in the Gospels, would appear to present as wide a distinction from that in the Epistles, as the absence of the article. The evident construction of the various passages in the Evangelists points it out as an official, and, in the Epistles, as a personal, designation.

“3. That the form 'Ιησοῦς Χριστός, occurs only five times in the Gospels, and in one of those cases is very suspicious (Matth i. 18.) This form occurs in the Epistles at least *one hundred and sixty* times.

“4. That the form Χριστός 'Ιησοῦς, never once occurs in the Gospels, and only some two or three times in the Acts, where it is far from certain that they are not to be disjoined in translation, while in the Epistles it is very common.

“5. Upon the broad question of the nomenclature of Christ, that, while the Epistle writers use the same terms by which he is designated in the Gospels, 'Ιησοῦς and Χριστός separately, about *two hundred* times—(that is supposing—what we are not prepared to grant—that the ὁ Χριστός of the Gospels and the Χριστός of the Epistles are the same)—in *three hundred* cases besides, they use an appellation that is either altogether unknown, or scarcely known, to the Evangelists.

“6. That 'Ιησοῦς in the Gospels occurs in the proportion of *fourteen*

to *one* to *Χριστός* in the Gospels; and that *Χριστός* in the Epistles occurs in the proportion of *ten* to *one* to *Ἰησοῦς* in the Epistles. That thus the immense predominance of *Ἰησοῦς* is the characteristic of the one, as that of *Χριστός* is of the other.

"7. Lastly, a comparison of an equal number of chapters in each class of writings presents the following curious proportions. We take Mark as the representative of the Evangelists, because, containing the same number of chapters as Paul to the Romans, and his first Epistle to the Corinthians:—

<i>Ἰησοῦς</i> , the Gospel designation, occurs			
	in Mark,	.	95 times.
	in Romans,	.	38 ...
	in 1st Corinthians,		28 ...
<i>Χριστός</i> , the Epistolary designation, occurs			
	in Mark,	.	7 times.
	in Romans,	.	68 ...
	in 1st Corinthians,		68 ...
<i>Ἰησοῦς</i> alone, in Mark,			
		.	94 times.
	in Romans,	.	6 ...
	in 1st Corinthians,		1 ...
<i>Χριστός</i> alone, in Mark,			
		.	6 times.
	in Romans,	.	36 ...
	in Corinthians,		46 ..."—P. 80-49.

Omitting the author's expressions of confidence, as to the value of his "discovery," we go on to cite him,

"Thus far," he says, "we have ascertained that there are two distinct usages as to the terms by which the Saviour of the world is designated in the New Testament. They divide the sacred *nine* (for John counts twice,) into two groups, comprising the following names:—The *first*, Matthew, Mark, Luke, (his Gospel and Acts) and John; the *second*, Paul, James, Peter, John, (*i. e.* as an Epistolographer, presenting variations from the nomenclature of his Gospel) and Jude. The characteristic of the first group is, that they *habitually*, we do not say invariably, call the Saviour *Ἰησοῦς*; while that of the second group is, that they as *habitually* designate him by *Ἰησοῦς* with *Χριστός* conjoined, or by *Χριστός* alone. The question now to be asked in connexion with our argument is, which of these is the earlier usage? Is there evidence enough accessible to lead to a satisfactory conclusion? and does it lean decisively enough either way to give assurance to the mind?"

The author thinks so, and proceeds to develop the following proposition, namely—

"That the difference thus proved to exist, indicates a different period for the composition of the two classes of writings—the Gospels and Epistles; and that these periods must have been an early date for the Gospels, and one considerably later for the Epistles."—P. 50.

Passing by, as not affecting his own line of argument, whatever has been alleged in the endeavour to ascertain, on historical or philological grounds, the date of the several books of the New Testament, our author proceeds to make good his own ground. The usage of the Evangelists, as above stated, might, he says, be accounted for on one of three suppositions, as *first*, the overruling dictation of the Holy Spirit, intending this result; or, *secondly*, on that of collusion, or mutual understanding among the Evangelists themselves; or, *thirdly*, on that which he, and, we think justly, assumes to be the only reasonable supposition—

“That the name ‘*Ἰησοῦς*, as the designation of the Jew of Galilee, was the prevailing one at the time the sacred historians wrote; that the lives of Christ which they compiled, were drawn up before the simple appellation, ‘*Ἰησοῦς*, had given place, among his enemies, to the opprobrious ‘Son of Mary,’ ‘the Nazarene;’ and before the familiar appellation of friendship among his followers had been superseded by the titles of veneration, ‘the Lord,’ ‘the Lord Jesus,’ ‘the Christ of God.’ . . . The difference ascertained to exist, in a particular feature, indicates a different period for the composition of the two classes of writings, the Gospels and Epistles; and that these periods must have been, an early date for the Gospels, and one considerably later for the Epistles.”—P. 56.

In illustration of his assumption, that the marked difference now adduced affords a true chronological criterion, the author proceeds to furnish samples of the parallel usage prevailing among the early Christian writers. But this branch of his argument we here pass over, intending to advert to it presently, and with the hope of suggesting to the author a somewhat more careful and satisfactory treatment of it himself. Having occupied three or four pages with this description of evidence, he draws the inference—

“That the writers directly succeeding the inspired teachers of the Church—that is, the apostolic fathers—present exactly the same peculiarity which distinguishes the writers of the Epistles, (affording) proof, that in the interval between the last inspired volume and the first uninspired ecclesiastical Greek document, no change of usage can be detected; and, from the closeness with which the latter follow upon the former, that there was no room for the introduction of so remarkable a change, as that from the then common use to the ‘*Ἰησοῦς*, of the Evangelists; consequently, the Evangelists did not write during that interval. . . . But no man who has reflected for a moment upon the nature of that change, the contradictions it supposes, and the consequences it involves, can for a moment believe that change possible, or that the documents which exhibit it are a compilation of some period after the usage of the Epistles had established itself in the Church.”—P. 62.

The author then reasons from analogy, and says :—

“ If the philosophy of nomenclature be applied to the case before us, it leads to the same conclusion, that the Epistles are a later composition than the Gospels. In accordance with the laws of universal custom, and the laws of thought, the use of the simple and exclusive proper name must have preceded that of the surname, or of the two names together. The simple would have precedence of the compound, the individual of the official.”—P. 63.

In proof of which well-understood principle, the author adduces various instances, and then says :—

“ Just so it is with the name of the great Saviour in the Sacred writings. He first appears in the New Testament simply as the man ‘ Jesus ;’ but as his office becomes more clearly perceived and generally acknowledged, the man becomes absorbed in the Messiah, and ‘ the Christ ’ becomes frequent in use ; last of all, the notion of Messiahship becomes so intimately connected with his life, name, person, &c., that the word indicative of that office passes into popular use, no longer, however, in its strictly official sense, but as part and parcel of the name. Now, if this be anything like a correct explanation of the analogy existing between the processes—we say anything like correct, for an approach to correctness is enough for our purpose—the simple designation *Ἰησοῦς* is the primitive one, and the Gospels were written before the Epistles.”—P. 65.

Dr. Dobbin then argues, at some length, from the well-ascertained fact, that the appellation *Χριστιανὸν* had, at an early period, become the popular designation of the followers of Jesus, and thence infers that the Gospels must have been composed anterior to the bestowing this name upon them.

“ Had Jesus been the name in vogue among the disciples in the early years of the faith, as the common designation of their risen Master, it could scarcely be but that they could have received the name of Jesuites. That personal name, however, giving way before their constant impression and repeated public acknowledgments that he was the Messiah, had any name been given them within the borders of Palestine, it would have been Messianites, or some other form derived from the Hebrew name of the office with which their master was invested ; but obtaining it at Antioch—a thoroughly Hellenized and now somewhat Latinized city—the form it takes is *Χριστιανὸν*, Christians.”—P. 70.

The Epistles of Peter—the date of which comes necessarily within a limited period—were, nevertheless, of later date than several of the Epistles of Paul, allusion being made to them, as already well known in the Christian world, by Peter. Nevertheless, Paul’s Epistles exhibit that later usage in designating the Saviour which chronologically distinguishes them from the Gospels, and thus confines the period during which the Evangelists wrote within limits so narrow, as to prove that they were composed almost immediately after the ascension.

From the facts thus summarily stated, Dr. Dobbin draws his conclusion in the following terms :—

“The early origin of all the Gospels being settled by the preceding facts and argumentation, it follows that the system of Dr Strauss, which is built upon the hypothesis of their much later composition, must fall to the ground; the mythic dress which historic events assume on his system, being utterly at variance with the supposition of their recent occurrence.”—P. 80.

The mythic scheme, as propounded in the *Leben Jesu*, demands, by the admission of its author, a considerable lapse of time. Years must have rolled on, a generation or two passed away, before the traditions, which took their rise in facts, could be transmitted into myths.

To prove that he does not misrepresent the notions of Strauss on this subject, he cites several passages, such as the following :—

“A myth is the invention of a fact, with the help of an idea. A nation or religious community finds itself in a certain position in the midst of certain institutions and notions, in the spirit of which it lives; the nation or community finds itself constrained by invincible yearnings after satisfaction, as to the origin of those observances and views, to imagine for itself an origin for them. The real origin is concealed in the darkness of the past, or it is not sufficiently clear to correspond with the clearness and fulness of their enlarged conceptions and desires. By the light of those conceptions, and at the instigation of those desires, they trace upon the obscure canvas of the past an attractive picture of fabulous incidents; these incidents being but the reflection of their present thoughts and aspirations.”—P. 82.

In a word, Strauss professes to think that a period of thirty years might suffice for the evolution of the myth. Indeed, he is compelled, by facts not to be disputed, thus to pinch in the limits in which his hypothesis may take its range. But it appears that several of the Epistles were composed and published not later than at the expiration of this thirty years, and if the argument propounded in the tract before us be sound, the Gospels and Acts must have been composed within that time, and therefore so near to the events as that they may justly be styled contemporaneous narrations.

In conclusion, our author assumes that he has proved that a usage exists in the Gospels which does not appear in the Epistles of the New Testament: That this could not be co-ordinate either with the usage of the Epistles or with that of the Church, down to the remotest times since: That the Gospel usage, according to the obvious analogies of nomenclature, must be the earlier usage: That the name Christian, given to the followers of Jesus, indicates the supersession of the proper, by the official name of the Son of God, at a very early period; and he thence infers,—That, as the scheme of Strauss demands the supposition

that the Gospels were composed after the Epistles, it is utterly overthrown by the evidence and the argument now adduced.

To our author's argument we hope we have done justice in this brief statement of it; but we are not sure that he has done full justice to it himself in this "Tentamen," which, should it attract attention among the admirers of the "*Leben Jesu*," will probably be found open to cavil at one or two points. The broad facts adduced by the author, and which form the foundation of his reasoning, are obvious and unquestionable; nor do we hesitate to profess our belief that the inference on which he insists, is both logically and historically valid and good. But, to secure his position from assault, he should have thoroughly dealt with the whole of the exceptive cases, whether these be apparent only, or real; no labour bestowed in strengthening his defences at these points, should have been thought too much; and we are willing to hope that he will resume his task, rendering that complete and conclusive, which his opponents at least, as we predict, will think not to be so.

The exceptive instances which we have in view, are of two kinds, namely, those attaching to the Gospels and Epistles, and those occurring in the early ecclesiastical writers. Again, the first class is divisible in two; for we have *first* to consider those instances, few as they may be, in which the Evangelists use, or seem to use, the official designation as a proper name; and, secondly, those wherein the writers of the Epistles, conforming to the usage of the Evangelists, employ the personal name of Jesus alone.

The three Evangelists, Matthew, Mark, and Luke, whose parallelisms, to a great extent, indicate their relationship to some source common to the three, should be considered apart from John. For, an instance occurring in the three, and plainly belonging to the same discourse or occasion, should not be reckoned as three, but as one; whereas, in the Gospel of John, each instance bears an individual value. What we are in search of, then, is—either entire cases of deviation from the evangelic rule, or what may be termed ancipital instances of such departure. Thus, when Matthew says, "Book of the generation of Jesus Christ, son of David, son of Abraham," the fact of his subjoining the official appellative *χριστός* to the personal *Ἰησοῦς*, is only what should be looked for on such an occasion, when he is formally introducing Jesus, son of David, as the predicted Messiah. A large proportion of the apparent exceptions, adduced as such by Dr. Dobbin, are precisely of this kind, and, therefore, without scruple we mark them off as no real exceptions. The phrase employed by the Evangelist in concluding this genealogy, exhibits perspicuously the distinction then present to the habits of his

mind, between the personal and the official designation ;—" ἐξ ἧς ἐγενήθη Ἰησοῦς ὁ λεγόμενος χριστός." And thus we render the last phrase in the summing up of the genealogy in the seventeenth verse, " and from the Babylonish migration, unto the Messiah —'Ο χριστός—were fourteen reckonings of descent." In a somewhat different manner, the phrase occurring Luke, ii., 11, marks the writer's consciousness that the χριστός was one among *the several titles of honour and office*, usually assigned by the disciples to their master, " To you is born this day, in the city of David, a deliverer, who is the Messiah, the Lord." Of the same import precisely, is the form of designation in the twenty-sixth verse following, and parallel to it is Matthew, ii. 4. " He demanded of them when the Messiah (the Christ) should be born." Nor need we separately notice the first line of Mark's Gospel, nor Luke, iii. 15, nor Luke, iv. 41.

The instance, Matthew xi. 2, is noticeable, as it bears upon the argument. In the strictly narrative part of this passage, the Evangelist employs, as he is accustomed, the personal appellation Ἰησοῦς. But the special occasion, namely, John Baptist's inquiry whether this worker of miracles were indeed the expected Messiah, οὗ ἐγὼ ὁ ἐρχόμενος ; suggests necessarily that official appellation which Jesus in his reply was about to challenge for himself, as his right. Our Lord, in place of a direct answer, refers to his beneficent miracles ; and the Evangelist, as if anticipating the proper inference, says, " John, having heard in the prison the works of Christ, sent," &c. The occurrence, therefore, of this name in this place is natural, and should be regarded as no exception to the evangelic usage now in question.

The passage occurring, Matthew, xvi. 16, and the parallel places, Mark, viii. 29, and Luke, ix. 20, serve conspicuously to exhibit that distinction between the personal and official designation, which, during the period of our Lord's ministry on earth, forbad as well the interchanging of the two, as their agglomeration ; or the use of the latter at all, except on those few occasions when our Lord's Messiahship was actually in question. An obvious extension of this rule applies to the instance, Mark, ix. 41, " Because ye belong to Christ." The anticipated or foreseen act of faith and love, necessarily involved a belief in the Messiahship of Jesus ; the deed of kindness was rendered to the disciples of Jesus *on this very account*,—that Jesus was " the Christ." With equal clearness is this distinction observed in the passages, Matth. xxii. 41 ; Mark, xii. 35, 36, and Luke, xx. 41 ; where our Lord propounds to the gainsaying Pharisees a question, so perplexing to them, concerning the Messiah's relationship to David. The instance is clearly no exception to the Evangelic usage.

In the high tone of conscious, rightful authority, (Matth. xxiii.) our Lord, after arraigning the Pharisees, lays down the law for his own followers, at once assigning the reason of the injunction, and showing its sanction, "Be not ye called Rabbi, for one is your Master, even Christ." It was not his personal name, Jesus, but his official designation, Christ, that carried with it this reason and this sanction. The prediction, Matth. xxiv. 5, turned upon this very point, that many should profess themselves to be "the Christ." The same explanation applies precisely to the instance in the 23d verse of this same chapter, and to the corresponding places, Mark, xiii. 21, 22. The rule above mentioned holds good unquestionably in each of the instances occurring in the evangelic narrative of our Lord's trial, condemnation, and crucifixion. That trial, as carried on before the Jewish authorities, turned upon the very point, whether "this Jesus of Nazareth" were indeed the Christ. The last of these instances, Matth. xxvii. 17 and 22, proves that the Roman governor, acquainted only by popular report with the name and title of his prisoner, sufficiently understood that the name Christ, whatever might be its import, was a designation superadded to the personal name, Jesus.

A moment's attention should be given to the signal passage in Luke's narrative of our Lord's meeting with the two disciples on the road to Emmaus. Before his passion, he, in every instance, designated himself by that remarkable phrase, "The Son of Man," involving the undeclared truth that he was "The Son of God;" but now that his work of propitiatory suffering had been completed, and he was about to send forth his disciples to proclaim everywhere that "Jesus is the Messiah," he assumes his title, and speaking of himself, and perhaps exhibiting his pierced hands, puts the question, "Ought not Christ to have suffered these things, and to have entered into his glory?"

We have thus reviewed, very succinctly, but not inattentively, the three Evangelists, noticing each of the instances which constitute our author's list of exceptions, or of seeming exceptions, to the ordinary usage of the writers. In fairly considering these cases, we must declare, that not so much as one of them appears to us to be really an exception; and if we were to find fault with Dr. Dobbin, it must be, not on the ground of his having over-stated his argument, but on that of a too hurried treatment of the facts in detail, on which it rests. The three Evangelists, in their narratives, *invariably* designate our Lord by his proper name. The official designation occurs *only* on those few occasions when his right to it was directly or indirectly brought in question. They *never* speak, as do the later canonical writers, of "Jesus Christ," or of "Christ Jesus," or of "our Lord Jesus Christ,"

or of "the Lord Jesus," or of "Christ" alone. This was a style which did not come into use, in the early Church, until the closing of the period wherein the personal acts and ministrations of the Saviour were still so fresh in the recollection of many, as to impart to his personal name a predominance in their thoughts over his official titles. In a word, the name "Jesus Christ," as a *compound personal appellation*, does not appear to have had any currency, if heard at all, until the time when the vast majority of Christian converts were those who had had no direct, or nearly proximate acquaintance with him.

In the Acts of the Apostles we should naturally find indications of the transition from the simple evangelic usage to that of the Apostles in their epistles. Luke, in continuation of his Gospel, which he had closed with the account of the ascension of "Jesus," goes on to speak of the same Jesus, in the same style as he does also in reporting the addresses of Peter and others. In that of Peter to the people, after the miraculous exercise of the gift of tongues, we find, what might be termed the node of the two styles, or the point of contact between the past and the future. "Therefore, let all the house of Israel know assuredly, that God hath made that same Jesus, whom ye have crucified, both Lord and Christ," Acts, ii. 36. Thenceforward the "Jesus" who had walked on earth, and who was now "gone into the heavens," was the "Jesus Christ" into whose name (personal and official blended,) converts were to be baptized; "repent and be baptized every one of you, in the name of Jesus Christ, for the remission of sins." In that potent name also, miracles were henceforward to be performed. "In the name of Jesus Christ of Nazareth," says Peter to the lame man, "rise up and walk." In behalf of Jesus, the glorified Son of God, (Acts, iii. 13,) were now to be claimed all titles of honour; he was the "Holy One," and the "Just," and the "Prince of Life;" yet among these titles, the one which asserted his Messiahship was selected as his appellation.

In the following narrative of the opposition made to the preaching of the Apostles at Jerusalem, we find the recurring evangelic usage—the personal name alone, as well as the composite name, or designation:—it is "Jesus," and also "Jesus Christ of Nazareth." The agglutination of the two is again distinctly marked in that passage, (Acts, iv. 25,) wherein the application of the second Psalm—an acknowledged prophecy of the Messiah—the Christ—to the "holy child Jesus," shows the ground on which the two names became henceforward indissolubly blended; and thenceforward the Apostles "ceased not, daily in the temple, and from house to house, to teach and to proclaim the glad tidings that Jesus was the Christ," Acts, v. 42. It is a circumstance to be noted, that when Stephen was favoured

with a *visible manifestation* of the Lord's presence, it is "Jesus" that is named, as well as our Lord's own style of designating himself, "the Son of Man;" and it is "the Lord Jesus," not Jesus Christ, who is invoked by the dying martyr. Philip going down to a city of Samaria, announced to the people, *ὁ Χριστός* the Messiah, Acts, viii. 5; and those who joyfully received this announcement, were baptized in the name of "Jesus, the Christ," which baptism is presently afterwards referred to by the equivalent phrase, "the Lord Jesus."

The conversion of Paul presents an instance remarkably coincident with that offered in the death of Stephen. The Lord "appeared to him in the way," and the announcement therefore is, "I am *Jesus* whom thou persecutest;" and Ananias, divinely instructed, thus opened his message, "Brother Saul, the Lord, *even Jesus that appeared unto thee in the way.*" . . . The convert, thus convinced, "straightway preached Christ in the synagogues, that he is the Son of God." In every instance, and these need not be individually adduced, when the apostles proclaim their authoritative message, they speak of "Jesus Christ;" but when, in *the style of narrative*, they go back to the times of their Lord's ministry, they speak, as do the Evangelists, of "Jesus," and "Jesus of Nazareth." Thus, for example, Acts, x. 36 and 38. Yet, as years pass on, "Jesus Christ" becomes the customary designation, and in consequence, the disciples became known as *Χριστιανοί*.

Passages such as that occurring, Acts, xvii. 3, are most pertinent to the argument; especially when, as in this instance, bearing upon a later period of the apostolic ministry. The distinction which was becoming every year less and less marked in the ordinary usage of the Church, was revived as often as the claims of Jesus to the Messiahship came in question. Paul continued to "allege and prove, that the Messiah must have suffered, and risen again from the dead," and that "this Jesus which I preach unto you, is the Christ;" and so Apollos, "showed by the Scriptures, that Jesus was the Christ."

Would too much be assumed were we to point to the significant fact, that the furious demon which overmatched "the seven sons of Sceva," retained a recollection of awful encounters, near to the lake of Galilee, when he exclaimed, "*Jesus I know.*" It is more than curious to observe, that *whenever a personal recollection of the Lord is implied*, we find the phrase, "the Lord Jesus." Thus Paul, in his address to the elders of the Church at Ephesus, speaks of the ministry which he had received "of the Lord Jesus," and enjoins them also to remember the words "of the Lord Jesus," how he said on some special occasion—not recorded by the Evangelists, "It is more blessed to give than to receive."

The Acts of the Apostles, then, instead of furnishing so much as one instance which should throw ambiguity upon the present argument, confirms it, we are bold to say irresistibly, by various and minute accordances far beyond the reach of any imaginable contrivance in the writer; and which hold out to our view *that very transition* in the usage of the early Church, which is implied when the Gospels are compared, on this ground, with the Epistles. That change which the latter, as compared with the former, show to have had place within the compass of twenty or thirty years, the Acts of the Apostles reveal in its several stages, and in its completion.

The Gospel of John, in relation to the present argument, should be separately considered. Its marked individuality of style and peculiarity of subjects, show beyond a doubt that, whatever may be its points of coincidence with the other Gospels, they are such as flow necessarily from the oneness and consistency of truth. This Gospel, too, was of later date than the others, and coeval probably with some of the Epistles, as well as posterior to some. Why, then, should not this composition associate itself with the Epistles, rather than with the other Gospels, in relation to the point now before us? Plainly, because the mind of the writer, involuntarily, as is the case with one who was eye-witness of, and participator in the transactions he describes, goes back to the time of which he is speaking, and speaks of the past as if present. What we do find in this Gospel, is the distinction, so vital at the time to which the narrative relates, between the personal and the official appellation—"Jesus," and the "Christ of God." Jesus—indicated to them by John Baptist—was recognized by the earliest of his adherents, as the "Messias, which is, being interpreted, the Christ." Nothing can be more conspicuous than the fact, although incidentally exhibited in this Gospel, that, during the evangelic period, the official name had not, as during the subsequent period, conjoined itself with the personal; but that the two were not only disjoined in usage, but broadly distinguished in import, "We believe and are sure," says Peter, "that thou art that Christ, the son of the living God."—John vi. 69. And again vii. 26, "Do the rulers know indeed that this is the very Christ?" Some said, "Of a truth this is a prophet; others, this is the Christ; but some, shall Christ come out of Galilee?" "If any did confess that he was the Christ, he should be put out of the synagogue." "If thou be the Christ, tell us plainly." "We have heard out of the law, that Christ abideth for ever; and how sayest thou that the son of man must be lifted up? who is this son of man?"

Our Lord's public ministry brought to its close, and himself was setting foot on the ground of his propitiatory sufferings,

in a most solemn address to his Father, he takes to himself, as with authority, the designation, a true knowledge of which should convey eternal life,—“This is life eternal, that they might know thee, the only true God, and Jesus Christ, whom thou hast sent,” or rather, “him whom thou hast sent, Jesus, the Christ;” and in accordance with this rightful assumption, as well as in explanation of its meaning, the Evangelist and Apostle declares that he had written what he had written, “that ye might believe that Jesus is the Christ, the Son of God, and that believing ye might have life through his name.”

We do not then find, in this Gospel, so much as a single instance which can be regarded as an exception to the evangelic usage; on the contrary, the interpretation which should be put upon that usage is placed beyond doubt in several marked cases, and the fact clearly established that the phrase ordinarily employed by the apostles in their Epistles had not become current, even if it had ever been so much as once used, until some time after our Lord's ascension. And this is the conclusion which we think our author might have brought home to the conviction of his readers much more forcibly than he has actually done, had he spread before them separately the instances on which the argument turns.

In like manner, in treating the next, and the not less significant branch of his argument, Dr. Dobbin might well have exchanged some pages which conduce little to the reader's satisfaction, for a more elaborate and logical analysis of those instances in the Epistles which might seem to bring his assumption into doubt. Our present limits, upon which already we have trenched, would be greatly exceeded were we here to attempt to do for him what we are sure with due diligence he might well do for himself, namely, free his argument from all plausible objection, by a strict examination, in series, of every instance in the Epistles which may appear to invalidate it; and we would beg, if we might so incite him to undertake this labour, to express our firm conviction, that learned assiduity, and rigid reasoning brought to bear upon it, would carry a tranquil assurance home to all candid minds, although they might still fail to impose silence upon the gainsayer.

The third branch of our author's argument—for so in our view his argument naturally divides, namely, that which relates to the usage of the early Church—the primeval ecclesiastical period,—we had fully intended to discuss with him, and with this view had actually turned over the principal ecclesiastical remains of the first, second, and third centuries; but the subject, to be treated in a manner at all satisfactory either to ourselves

or to our readers, would occupy a space larger than that which we have already filled. We can only say, that our scrutiny on this ground, while it has borne out our author's general assumptions, has convinced us of the urgent necessity of a far more searching, elaborate, and cautious treatment of it than he has seemed to think requisite. Apart from some such reconstruction and enlargement of his Tract, it will, as we predict, if it excite the attention of Strauss' adherents, be spoken of slightly, and as undeserving of a formal refutation—a refutation which they well know they could never furnish should the facts on which it rests be fully made out and set clear of all ambiguity. We earnestly hope that the subject may forthwith be taken up by Dr. Dobbin himself, or by some other.

Should he himself do so, we would suggest that, in place of the wholly unsatisfactory method which he professes (p. 58) to have followed, in adducing the evidence of the Fathers, and which can bring forth nothing better than a fortuitous and negative result, he would, through and through, examine the *earlier* writers;—for, as to the later, the practice of individuals, governed by taste or caprice, can be of no significance whatever in such an argument:—Some modern writers—and of a certain school, have *affected* the name “Jesus;” but such whims can mean nothing in an historical sense. The middle of the third century is the very latest date that can be allowed to bear upon the question at issue. Let Dr. Dobbin look again to Origen, and especially to the “*Contra Celsum*,” and he will understand what we mean in advising him to bestow more pains upon his Tentamen. This treatise, analogous as it is, in some respects, to Justin Martyr's Dialogue with Trypho (an earlier work by almost a century) would, when therewith compared, serve well to bring out the critical rule that should be applied to the entire mass of evidence under this head. But we must refrain.

It has been customary with writers on the Christian evidences to prepare the minds of their readers for an inconclusive issue of the argument, by premising the principle, too easily assumed, That, after all, and although proof of the divine mission of Jesus may be, and is *sufficient*, it will never reach a higher point of certainty; it will not, say such persons, for this deep reason, that Christianity itself is designedly adapted to the purposes of moral discipline, and is intended to come to us as a trial—a severe trial, of the principle of faith, and of humble submission to an authority veiled in darkness. There is a truth, no doubt, involved in such representations, and we may be quite sure that the man of faith and piety, in the present scene of things, will never want occasion for the exercise of the disposi-

tions we have named. Meantime, this subject may be looked at in another light.—The logic of historical analysis has been greatly advanced of late; the science of criticism, philological, and historical, has been matured; a vast mass of actual facts, literary, historical, philological, numismatic, ethnical, physical, and these bearing upon every period within the range of actual history, has been accumulated and rendered accessible. During the same time the crusted prejudices of well-intending but superstitious ages, have been exposed to powerful solvents, and if they have not actually been broken up, they have parted and are fast melting away. It cannot, then, be imagined, or be granted as probable or possible, that a body of documents, copious and various, and belonging to a bright historic era, should remain to defy all logic and to baffle every engine of historical and critical analysis. We think it utterly preposterous to suppose that a mass of writings such as the Christian Scriptures, should for ever, or indeed should much longer, stand over as a case of interminable ambiguity. If, indeed, our modern methods, severe as they are, must still fail before this problem, the progress assumed to have been made in our times by human reason in all departments of science, is far less real than has been supposed. On the contrary, we believe this progress to be real, and modern methods of inquiry to be genuine and effective, and, therefore, hold that there needs only a rigid application of them to the Christian evidences, to bring forth a result never again to be questioned, and which, when announced and assented to, will be of a kind that must diffuse a new life through the moral world.

or to our readers, would occupy a space larger we have already filled. We can only say, that this ground, while it has borne out our assertions, has convinced us of the urgent necessity of searching, elaborate, and cautious treatment and enlargement of his *Tract* to excite the attention of Strauss' disciples, and as undeserving of a notice which they well know they could not on which it rests be fully made.

We earnestly hope that the views of Dr. Dobbin himself, as it is excellent.

Should he himself do so, in the superficial views of the attractive style, and the wholly unsatisfactory manner in which its author indulged, have followed, in a more satisfactory manner in meeting with which can bring forth more power and influence. Professor Whewell, author, who has made science, in its writer's;—for, as to its highest relations, his constant and by taste or capacity is a plain and even dry writer, seldom an argument, and in few flights of fancy, in no captivating have affected in no charms of diction; but his sober and accurate nothing in and profound knowledge of his subject, make him a is the very authority and a safe guide, in comparison of those flowery question, inductive writers, whose shallow draughts at the Pierian spring especially served only to intoxicate them, and to give them presumptuousness in proportion to their incapacity.

The present work is the more valuable, that it is not controversial. It is in its conception, and, indeed, is not new, except in the shape which it has received. Dr. Whewell, desirous to afford, with most effect, his testimony as a man of science to the consistency of natural science with natural and revealed religion, has, with great judgment, thrown together with very little addition or alteration, those passages in his larger works on the History and on the Philosophy of the Inductive Sciences, in which he was led by the course of his subject to treat of the theological bearing of the discoveries and reasonings embraced in the various departments of scientific research. If, by following this course, he has sacrificed some of the charms of composition, he has attained more solid advantages. He cannot be suspected of uncandid statements, or perverted reasoning, into which a controversialist, setting before him for attack or defence a set of disputed dogmas, and animated by the heat of conflict, may often justly be accused of falling. His reflections and reasonings, here brought together, formed parts of great works in which he reviewed in succession the progress and genius of all the great branches of science; and each extract, when in its original place, arose naturally and unforced out of a calm

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survey of the field of ascertained facts and laws ; and so, when now separated, is stamped with the character of sobriety and truth which great knowledge, and comprehensive and repeated reflection, can alone impart. While therefore, as we might expect, the work is defective in system, a little disjointed, containing some repetitions, and some abrupt transitions, the countervailing advantage preponderates, that we are in the hands of one who writes from no affectation, or vanity, or pertinacity, but with an anxious desire to apprehend and express the truth.

A volume of this nature is of great value, not only as affording fresh refutation of the cavils of unbelievers, but as tending to reconcile and incite men of piety to the investigation of the wonders of creation. For one of the worst effects of infidel assaults has been that religious men have been led to look with suspicion and jealousy on such studies, and if not absolutely to proscribe them, at least to feel very little at ease in their prosecution, and to keep at a safe distance from their more recondite branches. They have thus been robbed of much pleasure and profit—the pleasure of contemplating with freedom and triumphant praise the works of their Almighty Father—the profit arising from deepened sensations of awe and reverence for his wisdom and almightiness. If there is any truth in the charge made against some men of fervent piety, that there is too great familiarity in their addresses to the Deity ; no remedy surely can be so good for the fault, as a more frequent and definite contemplation of the displays of his awful attributes of power and wisdom.

Another important advantage, arising from an intimate knowledge of science, is the power which the Christian disputant thereby obtains of meeting and overthrowing the systems of paganism and idolatry. Ignorance of natural science is the mother of polytheism ; and the most portentous system of pagan idolatry ever seen—that which prevails in Hindostan—is based on a complication of errors in physics and natural history ; the exposure and removal of which are, humanly speaking, the only sure means of overthrowing the monstrous superstructure.

We shall run rapidly over some of the important questions treated of in the book before us, chiefly for the purpose of introducing a few quotations, to convey an idea of Professor Whewell's sentiments and style.

The first great province into which we enter is that assemblage of physical truths, classed together under the name of Natural Philosophy. The history of its growth is instructive. The unenlightened savage ascribes each natural operation and effect to the interposition of a Deity presiding over that particular domain of nature. With him every thing that occurs is a miracle, and

is ascribed to the direct agency of the god of thunder, of ocean, of fire, of the seasons, of the winds, of the mountain, the river, or the plain. Before the discoveries of philosophers, therefore, the ancient deities retreat,—

“ From haunted spring and dale,
The parting genius is with sighing sent.”

The course of nature is unfolded—the physical laws which regulate the stars in their revolutions, the combinations of chemistry, the action of light, and heat, and fluids ; and when the student can predict the eclipse, and imitate the lightning, the reign of subordinate divinities is at an end. All men of intelligence then change their polytheism into belief of one presiding and creative intelligence—the God of nature—acting usually by the fixed laws which he imposed on matter when he brought it into being ; but still presiding to uphold all, and controlling man by his special intervention in disease, accident, and tempest. But some—led away by the extent to which fixed law appears to prevail, and the resolution of numerous apparent exceptions into parts of higher laws—run into the opposite extreme from the unlearned savage, and erect the course of nature into a kind of divinity. They resolve every thing into law, but can find no evidence of a Law-giver ; they trace backward, for instance, the solar system through its vast cycles, and while one party holds an eternity of matter, and sees no necessity for any cause of which that system is the effect, another embraces the notion of a gradual progress and evolvment out of a primeval chaos. The latter principle has animated many theories—from the fortuitous concourse of atoms of Lucretius, down to the nebular hypothesis of Laplace, and the universal fire-mist of the author of the “ Vestiges.”

We have already shown, in our review of the last-named work, that the nebular hypothesis, based originally on insufficient data, is now contradicted and disproved by well ascertained facts. But we cannot resist quoting the unanswerable remarks of Dr. Whewell on the tendency of the theory, assuming it to have all the consistency and beauty as a physical hypothesis which its advocates claim for it.

“ It appears, then, that the highest point to which this series of conjectures can conduct us, is ‘ an extremely diffused nebulosity,’ attended, we may suppose, by a far higher degree of heat, than that which, at a later period of the hypothetical process, keeps all the materials of our earth and planets in a state of vapour. Now is it not impossible to avoid asking, whence was this light, this heat, this diffusion ? How came the laws which such a state implies, to be already in existence ? Whether light and heat produce their effects by means of fluid vehicles or otherwise, they have complex and varied laws which indicate the

existence of some subtle machinery for their action. When and how was this machinery constructed? Whence too that enormous expansive power which the nebulous matter is supposed to possess? And if, as would seem to be supposed in this doctrine, all the material ingredients of the earth existed in this diffuse nebulosity, either in the state of vapour, or in some state of still greater expansion, whence were they and their properties? how came there to be of each simple substance which now enters into the composition of the universe, just so much and no more? Do we not, far more than ever, require an origin of this origin? an explanation of this explanation? Whatever may be the merits of the opinion as a physical hypothesis, with which we do not here meddle, can it for a moment prevent our looking beyond the hypothesis, to a First Cause, an Intelligent Author, an origin proceeding from free volition, not from material necessity? Leaving then, to other persons, and to future ages to decide upon the scientific merits of the nebular hypothesis, we conceive that the final fate of this opinion cannot, in sound reason, affect at all the view which we have been endeavouring to illustrate;—the view of the universe as the work of a wise and good Creator. Let it be supposed that the point to which this hypothesis leads us, is the ultimate point of physical science; that the farthest glimpse we can obtain of the material universe by our natural faculties, shows it to us occupied by a boundless abyss of luminous matter; still we ask, how space came to be thus occupied—how matter came to be thus luminous? If we establish by physical proofs, that the first fact which can be traced in the history of the world, is that ‘there was light,’ we shall still be led, even by our natural reason, to suppose that before this could occur, ‘God said, Let there be light.’”—Pp. 16-17, 19.

Let us, however, come back to our conclusion, that the nebular hypothesis is unfounded, and ask what then is the condition of the solar system? Laplace demonstrated that its stability has been provided for; since the planets move in the same direction, and have orbits of small eccentricity and slightly inclined to each other, he has shown that it follows mathematically that the orbits will always remain nearly circular, and that the earth’s axis of revolution will not deviate much from its present position. Now the adversaries of Theism may say, how do we know that this stable system has not existed from eternity? how can we be forced to admit a great First Cause? Dr. Whewell takes up this subject, and shows the insufficiency of the common argument to prove the existence of God, without keeping clearly in view the axiom assumed in it. It is this—

“Since the world now exists, and since nothing cannot produce something, something must have existed from eternity. This something is the First Cause; it is God.”

But mark the answer—

"Granted, the opponent might say, that something must have existed from eternity; but this *something*, why may it not be this very series of causes and effects which is now going on, and which appears to contain in itself no indication of beginning or end?"

The argument is thus resisted; and to evade the force of the answer it is necessary to bring out the assumed axiom, which alone gives force to the argument. It is this—That there must of necessity be a First Cause. This is an axiom granted by all intelligent reasoners; and why? There is an intellectual necessity for it. By the constitution of our minds we admit it; it cannot be demonstrated; it is involved in our mental being.

"Our minds cannot be satisfied with a series of successive, dependent, causes and effects, without something first and independent. We pass from effect to cause, and from that to a higher cause, in search of something on which the mind can rest; but if we can do nothing but repeat this process, there is no use in it. We move our limbs, but make no advance. Our question is not answered, but evaded. The mind cannot acquiesce in the destiny thus presented to it, of being referred from event to event, from object to object, along an interminable vista of causation and time. Now, this mode of stating the reply,—to say that the mind *cannot thus be satisfied*, appears to be equivalent to saying that the mind is conscious of a principle in virtue of which such a view as this must be rejected;—the mind takes refuge in the assumption of a First Cause, from an employment inconsistent with its own nature."—Pp. 154-5.

One proof of the soundness of this position is the very eagerness with which our opponents grope backward for a theory of the gradual formation of the universe; they are seeking an origin, a First Cause, by the irresistible tendency of their nature. Our author further observes, that this tendency of the mind to assume a First Cause is just the tendency to assume a cause for every effect in a different form; for, viewing the world in its totality as an effect, we seek for Deity as its cause. In answer to the question, whether our conception or idea of a First Cause arises *a priori* or *a posteriori*, he draws this sound distinction—

"Is our Conception or Idea of a First Cause gathered from the effects we see around us? It is plain that we must answer, here as in other cases, that the Idea is not extracted from the phenomena, but assumed in order that the phenomena may become intelligible to the mind;—that the Idea is a necessary one, inasmuch as it does not depend upon observation for its evidence; but that it depends upon observation for its development, since without some observation, we cannot conceive the mind to be cognisant of the relation of causation at all."

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result, then, of a review of physical science is, that viewing

all the phenomena around us as effects, it investigates their causes, it resolves the most complex substance into its elements, and traces the laws of the eccentric comet and the chainless wind; but when it has reached the simplest element and the highest law, it surrenders us to that irresistible conviction of our minds that beyond is a Being of necessary and unchanging existence, uncaused, and the Cause of all.

Passing from astronomy and general physics, let us turn to another province—the domain of animal and vegetable life. Here we are able to assume the offensive; for in all the contrivances of organized creatures we find design so clearly legible, even to the weakest eye, that it is almost impossible to speak of them without using language which assumes it—such terms as adaptation, purpose, end; thus tacitly assuming a final cause and an intending mind.—

“This conception makes its appearance very early. Indeed, without any special study of our structure, the thought that we are fearfully and wonderfully made, forces itself upon men, with a mysterious impressiveness, as a suggestion of our Maker. In this bearing, the thought is developed to a considerable extent in the well-known passage in Xenophon's *Conversations of Socrates*. Nor did it ever lose its hold on sober-minded and instructed men. The Epicureans, indeed, held that the eye was not made for seeing, nor the ear for hearing; and Asclepiades, whom we have already mentioned as an impudent pretender, adopted this wild dogma. Such assertions required no labour. ‘It is easy,’ says Galen, ‘for people like Asclepiades, when they come to any difficulty, to say that nature has worked to no purpose.’ The great anatomist himself pursues his subject in a very different temper. In a well-known passage, he breaks out into an enthusiastic scorn of the folly of the atheistical notions. ‘Try,’ he says, ‘if you can imagine a shoe made with half the skill which appears in the skin of the foot.’ Some one had spoken of a structure of the human body which he would have preferred to that which it now has. ‘See,’ Galen exclaims, after pointing out the absurdity of the imaginary scheme, ‘see what brutishness there is in this wish. But if I were to spend more words on such cattle, reasonable men might blame me for desecrating my work, which I regard as a religious hymn in honour of the Creator.’”—Pp. 21-2.

Some philosophers, indeed, reject altogether the conception of a plan or purpose in the organs of animals, and hold it to be unphilosophical and dangerous to assume anything of the kind. Geoffroy says, “I take care not to ascribe to God any intention, and I know nothing of animals which *have to play a part* in nature.” After discussing the doctrine of unity of plan which these inquirers have vainly endeavoured to set up in the place of design, our author says—

"In fact the assumption of an end or purpose in the structure of organized beings, appears to be an intellectual habit, which no efforts can cast off. It has prevailed from the earliest to the latest ages of zoological research; appears to be fastened upon us alike by our ignorance and our knowledge; and has been formally accepted by so many great anatomists, that we cannot feel any scruple in believing the rejection of it to be a superstition of a false philosophy, and a result of the exaggeration of other principles which are supposed capable of superseding its use. And the doctrine of unity of plan of all animals, and the other principles associated with this doctrine, so far as they exclude the conviction of an intelligible scheme and a discoverable end, in the organization of animals, appear to be utterly erroneous."—P. 37.

But this is not all; not only has the principle that the parts of the bodies of animals were made in order to discharge their respective functions constantly forced itself on the minds of zoologists and anatomists of all ages; but it has served as a guide, whose indications they could not help following, and which has led them into the greatest discoveries. It was this process of reasoning, and neither accident nor delicate observation, that led Harvey to discover the circulation of the blood. He did not by microscopic examination see it pouring along the veins, but he found in the blood-vessels certain valves, and he paused to inquire for what purpose they were placed there, what *part they had to play* in the body, and he did not stop in his admirable investigation until the whole marvellous system lay unfolded to his view. It has been by proceeding on the same conviction that the use of each organ has been discovered, and the whole study of comparative anatomy is just the study of the adaptation of animal structures to their destined purposes. But it was especially in the hands of Cuvier that the doctrine of final causes became an instrument of brilliant success in physiological research. By its aid he reconstructed and placed before our eyes animals widely different from any now existing on the earth, and of which only a few scattered and disjointed fragments had survived the wreck of ages, and gave birth to one of the most interesting of modern sciences.

"Cuvier's merit consisted, not in seeing that an animal cannot exist without combining all the conditions of its existence; but in perceiving that this truth may be taken as a guide in our researches concerning animals;—that the mode of their existence may be collected from one part of their structure, and then applied to interpret or detect another part. He went on the supposition not only that animal forms have *some* plan, *some* purpose, but that they have an intelligible plan, a discoverable purpose. He proceeded in his investigations like the decipherer of a manuscript, who makes out his alphabet from one part of the context,

and then applies it to read the rest. The proof that his principle was something very different from an identical proposition, is to be found in the fact, that it enabled him to understand and arrange the structures of animals with unprecedented clearness and completeness of order ; and to restore the forms of the extinct animals which are found in the rocks of the earth, in a manner which has been universally assented to as irresistibly convincing."—P. 48.

The learned Professor, in confirmation of the view that the doctrine of final causes is calculated to be a guide in scientific research, refers to the position maintained by him in his *Bridge-water Treatise* (book iii. chaps. 7 and 8), that the greatest discoverers in science have generally been those who set out with a belief in an Intelligent Ruler of the universe. Others have dealt familiarly with known physical truths, or have conjectured boldly as to the unknown, but it has been by men animated by that conviction that the solid generalizations have been made which have materially extended the boundaries of our knowledge. Many great names will readily occur in proof of this position, and among living philosophers it is gratifying to find that the greatest names are illustrations of its accuracy. It is sufficient to mention that of Sir John Herschel, who in concluding his address at the Meeting of the British Association in 1845, gives us this memorable assurance,—“ Surely were each of us to give utterance to all he feels, we should hear the chemist, the astronomer, the physiologist, the electrician, the botanist, the geologist, all with one accord, and each in the language of his own science, declaring not only the wonderful works of God disclosed by it, but the delight which their disclosure affords him, and the privilege which he feels it to be to have aided in it.”

The decided tendency, therefore, of a survey of organic life being to intimate to us the existence of a powerful and intelligent mind, the provident Contriver of all, our author expresses the feelings of the true philosopher on receiving such intimations, in the following eloquent passage :—

“ The real philosopher, who knows that all the kinds of truth are intimately connected, and that all the best hopes and encouragements which are granted to our nature must be consistent with truth, will be satisfied and confirmed, rather than surprised and disturbed, thus to find the natural sciences leading him to the borders of a higher region. To him it will appear natural and reasonable, that, after journeying so long among the beautiful and orderly laws by which the universe is governed, we find ourselves at last approaching to a source of order and law, and intellectual beauty ;—that, after venturing into the region of life and feeling and will, we are led to believe the fountain of life and will, not to be itself unintelligent and dead, but to be a

living mind, a power which aims as well as acts. To us this doctrine appears like the natural cadence of the tones to which we have so long been listening; and without such a final strain our ears would have been left craving and unsatisfied. We have been lingering long amid the harmonies of law and symmetry, constancy and development; and these notes, though their music was sweet and deep, must too often have sounded to the ear of our moral nature, as vague and unmeaning melodies, floating in the air around us, but conveying no definite thought, moulded into no intelligible announcement. But one passage which we have again and again caught by snatches, though sometimes interrupted and lost, at last swells in our ears full, clear, and decided; and the religious 'Hymn in honour of the Creator,' to which Galen so gladly lent his voice, and in which the best physiologists of succeeding times have ever joined, is filled into a richer and deeper harmony by the greatest philosophers of these later days, and will roll on hereafter, the 'perpetual song' of the temple of science."—Pp. 51-3.

But the sceptic has a resource left in the doctrine of the transmutation of species. According to this theory, the parts of the animal are not adapted to the place he is destined to fill; but the situation into which he fortuitously comes, shapes and moulds the parts. It is not that the eagle, destined to be a denizen of air, had his muscles and pinions and feathers, framed and balanced and lubricated so as exquisitely to suit the mode of locomotion and the dwelling-place preordained for him, and even his eye covered with a slender veil, that from his lofty eyry he might gaze undazzled on the sun,—but that some unlucky fish, whose progenitor ages before had been a zoophyte with no organ but a stomach,—in some great flood,

"Omne cum Proteus pecus egit altos
Visere montes—"

happened to be stranded on a hill, or entangled in the branches of a tree, and finding it necessary to have wings, feathers, claws, and beak, tried hard to obtain these new appendages, and succeeded. According to this hypothesis, the force of circumstances alone has gradually raised the rude zoophyte through an unbroken chain into the perfect man. No room is left for a creative hand to plant new species, or a creative mind to adapt each to its intended sphere. The Creator is at least pushed back to the utmost verge of creation in the vain hope of banishing him altogether.

For here again, the answer is twofold. The hypothesis is absolutely inconsistent with facts, the assumptions are false, the opinion is ridiculous. This we have shown at some length recently, and need not enter on the proof now. But if it were probable and consistent, it would just come to this, that the wondrous germ of

all animal life would tell of the adorable Creator preferring to act through a long series of causes and effects, and to wrap these up in the original seed. The tiny acorn, expanding in the course of ages by the laws of natural growth into the monarch of the forest, is to the intelligent mind as convincing a proof of wise contrivance as the full tree would have been, if, like Jonah's overshadowing gourd, it had, unsown, sprung to maturity in a single night.

Another group of sciences which Dr. Whewell considers, he classes under the name of Palætiology. The palætiologist is the antiquary of science, endeavouring to trace from present appearances the past history of the universe; and to him all natural objects are, as it were, a pile of antiquities, from the nature and position of which he draws his inferences. The philosopher who traces language, government, law, mythology, to their sources, is no less a palætiologist. Every inquiry into the testimony afforded by the architectural remains of a country to the history or origin of the inhabitants, is an instance of palætiological research. Geology is purely and pre-eminently of this class of sciences which infer what has been from what is. We can fancy the geologist to be like the Indian savage on the trail; here he detects the traces of an ancient flood—here the marks of a primeval glacier—there the foot-prints of a megatherium. From this class of sciences, then, what indications do we derive? In all that we examine we find marks of previous successive changes, the extent and nature of which we can often discover with great accuracy. Here we know that a lake once made its quiet deposits, that these were hardened by subsequent heat, that anon a volcano ruptured the crust thus formed, and belched out its liquid fire, over which, when cooled, groves have flourished and decayed. Or, to go to another field,—two languages, now diverse, can be traced by connecting links till we are convinced that they have a common parent, and that, subjected to different influences, they have each changed in a different direction. The changes we find indicate generally causes much more powerful than any that we see in operation around us, even if we take the hypothesis of immense periods of time during which they might act. It is contended by some that present causes of change and actually existing agents are sufficient to account for all appearances, if we suppose their acting uniformly through long periods. Were this view tenable as consistent with observation,—which it is not,—it would not present any intrinsic advantages, any superior simplicity, as its advocates seem to believe, in comparison of the rival doctrine of successive catastrophes. For, on a large view, the plan of the universe may embrace in its uniformity periods when existing forces are awaked into more powerful action, and which to us,

seeing their more tranquil operations, may seem, and indeed be, periods of catastrophe. There may be cycles on a great scale of violence and repose, just as, within the memory of man, Vesuvius has its periods of eruption and quiescence.

"Thus violence and repose may alternate upon a scale of time and intensity so large, that man's experience supplies no evidence enabling him to estimate the amount. The course of things is *uniform*, to an Intelligence which can embrace the succession of several cycles, but it is *catastrophic* to the contemplation of man, whose survey can grasp a part only of one cycle."—P. 111.

We have read somewhere an elegant fable, which imagined an aged ephemeron, the insect of a day, explaining with expiring voice to his youthful kindred how the coeval sun, sinking in the western sky, had in his early youth clomb up from the east, and predicting ere long an awful catastrophe and final night. So, to us, who in comparison of Him with whom a thousand years are but as one day, may justly be called ephemeral, our period of quiescence may appear to have commenced with a catastrophe, and to be threatened to be closed with another, while in his plan they may be seasons regularly recurring according to fixed laws of activity, following rest as naturally as within our own experience day is ushered in by night.

Since, then, everything points towards successive periods of violence, let us follow this guiding clue. We are carried backward indefinitely in many departments of investigation, such as the periods of astronomy, and the revolution of the earth's crust, but we can never by scientific inquiry reach a beginning, or detect the origin of anything. We are driven to suppose an origin not in the course of nature, that is, supernatural. But it is from organic remains that we obtain more certain indications. The doctrine of transmutation being given up, then, the researches of geology inform us of the disappearance of species, and the appearance of new ones. Whence come these? By no natural generation. Nature's antiquary is silent; he cannot tell or describe the process by which they sprang out of nothing. But we know more; the species of animals appear in groups between periods of catastrophe; there is a different series between each two such periods; and since man has existed there has been one distinct series of species of plants and animals.—

"Hence, even on natural grounds, the most intelligible view of the history of the animal and vegetable kingdoms seems to be, that each period which is marked by a distinct collection of species forms a cycle; and that at the beginning of each such cycle a creative power was exerted, of a kind to which there was nothing at all analogous in the succeeding part of the same cycle. . . . None of the in-

fluences which have modified the present races of animals and plants since they were placed in their habitations on the earth's surface can have had any efficacy in producing them at first. We are necessarily driven to assume, as the beginning of the present cycle of organic nature, an event not included in the course of nature."—P. 118.

The same train of reasoning applies to language. We find, indeed, some causes of change and inflexion still in operation; but we never now can detect a language in the process of formation, unfolding itself in inflexions, terminations, and changes of vowels by grammatical relations, such as characterize the oldest known languages. The conclusion is, that in the earlier stages of man's career the revolutions of language must have been of a nature quite different from those occurring in his recent history, and that when we mount up to the origin of language we cannot conceive of it as arising by any process of natural causation.

The result, then, of a survey of this field of investigation is, that as we go backward the thread of our inquiries is always snapped—"an abyss interposes itself between us and any intelligible beginning of things." The information we derive from organic remains is important and definite; because, while we can trace back individuals by natural generation indefinitely, here we learn of the birth of species at a time within definite limits; and of the manner of this birth no trace can be found, nor can it be imagined like any natural event. Science, therefore, on this point—the origin of things—can tell us nothing positively; but negatively she enables us to draw important inferences, which all tend towards a supernatural origin of things. To use our author's own beautiful language—"The mystery of creation is not within the range of her legitimate territory; she says nothing, but she points upwards."—P. 71.

Is there then any other quarter from which we can learn about creation? There is;—Science having told us nothing on the subject, there is room for Revelation; and its instructions accord with what our reason would have led us to. After surveying all the material universe, and its numerous marks of design, we find in man a different principle—mind—that which designs and comprehends design; and we draw the inference that the Creator who forecast the whole must be a Spirit; and as our minds have not existed from eternity, and are not self-created, the same being must be their Creator also, and possess in infinite extent the same faculties.

Now we possess a book purporting to be a revelation from this being, the Father of our Spirits, attested by miracles, adapted to the moral wants of man, and speaking a language which the human heart understands. This book tells us explicitly that all nature is the work of one omnipotent and omniscient Being, who

made all things out of nothing by his word ; who also made man in his own likeness, rules over him by his providence, and opens a communication with him in its sacred pages.

But the sceptic here interposes and arrests our hand, as we eagerly stretch it forth to grasp this precious boon for our fallen race. This book cannot be authentic, he suggests. It claims to be written by the Maker of the world, and yet the author was ignorant of the mechanism of nature ; its language involves errors in physical science which the all-wise and omniscient One could not have made, and which the progress of knowledge has revealed to us. If the Bible professed to be in any degree a treatise on Natural Philosophy, there might be some room for this objection. But it is not ; it has wholly a moral purpose, and it treats of the history of the universe, or of the history of man on the earth, only so far as is subservient to that. It was given to man not as an ignorant but as a sinful being ; not to instruct him in physical truth, which he could find for himself, and could do without, if not found, but to convince him of his moral errors, and open up to him a remedy which he could not find for himself, and could not do without. This being its professed object, what wonder if the author of the book, adopting the language and ideas in physical subjects current at the time, strove merely to reach the heart ? Does any valid objection arise to its authenticity because its language is inconsistent with the modern discoveries in science ? But we can go much farther : it is more in accordance with divine wisdom that the language in which a providential scheme meant to affect the moral nature alone was conveyed, was not adapted to discoveries not then made, and which it would have been unsuitable to the grand purpose of the writing to reveal. This Dr. Whewell well shows :—

“ If any terms had been used, adapted to a more advanced state of knowledge, they must have been unintelligible among those to whom the Scripture was first addressed. If the Jews had been told that water existed in the clouds in small drops, they would have marvelled that it did not constantly descend ; and to have explained the reason of this, would have been to teach atmology in the sacred writings. If they had read in their Scripture that the earth was a sphere, when it appeared to be a plane, they would only have been disturbed in their thoughts, or driven to some wild and baseless imaginations by a declaration to them so strange. If the Divine Speaker, instead of saying that he would set his bow in the clouds, had been made to declare that he would give to water the property of refracting different colours at different angles, how utterly unmeaning to the hearers would the words have been ! And in these cases, the expressions, being unintelligible, startling, and bewildering, would have been such as tended to unfit the Sacred Narrative for its place in the providential dispensation of the world.”—Pp. 181-2.

There was indeed one thing which it was important for man to know—the fact of creation, and the omnipotence and unity of the Creator—and that is explicitly revealed, and to that no contradiction is found in nature; for that, as we have seen, science, even in its ripest maturity, leaves room—standing apart, with the silent but upwardly-directed look of expectation.

Dr. Whewell remarks also, that the imagined discrepancies between Scripture and science arose in great measure only from divines sticking too much for a received interpretation, that having been previously moulded by the erroneous state of physical knowledge.

“The meaning which any generation puts upon the phrases of Scripture, depends, more than is at first sight supposed, upon the received philosophy of the time. Hence, while men imagine that they are contending for revelation, they are, in fact, contending for their own interpretation of revelation, unconsciously adapted to what they believe to be rationally probable. And the new interpretation, which the new philosophy requires, and which appears to the older school to be a fatal violence done to the authority of religion, is accepted by their successors without the dangerous results which were apprehended. When the language of Scripture, invested with its new meaning, has become familiar to men, it is found that the ideas which it calls up, are quite as reconcilable as the former ones were, with the soundest religious views; and the world then looks back with surprise at the error of those who thought that the essence of revelation was involved in their own arbitrary version of some collateral circumstance. At the present day we can hardly conceive how reasonable men should have imagined that religious reflections on the stability of the earth, and the beauty and use of the luminaries which revolve round it, would be interfered with by its being acknowledged that this rest and motion are apparent only.”—Pp. 6-7.

The last remark of the learned Professor to which we shall allude, is his observation on the danger and impropriety of endeavouring to rest the authenticity of Scripture on its consistency with natural science. In so doing, divines necessarily embark the credit of the Sacred Writings on some hypothesis of natural philosophy, which in the end may turn out untenable, and in sinking, may draw down the cause perilled upon it. Therefore,

“If any one were to suggest that the nebular hypothesis countenances the Scripture history of the formation of this system, by showing how the luminous matter of the sun might exist previous to the sun itself, we should act wisely in rejecting such an attempt to weave together these two heterogeneous threads;—the one a part of a providential scheme, the other a fragment of physical speculation.”—P. 134.

The lesson which our author thus reads to divines is fortified by a reference to various Christian writers, and a discussion of

the case of Galileo, on which our limits forbid our entering. We cannot, however, resist quoting the following passage from Kepler, which Dr. Whewell refers to as a specimen of the suitable temper of the Christian philosopher in regard to such questions :—

“ I beseech my reader that, not unmindful of the Divine goodness bestowed upon man, he do with me praise and celebrate the wisdom of the Creator, which I open to him from a more inward explication of the form of the world, from a searching of causes, from a detection of the errors of vision ; and that thus, not only in the firmness and stability of the earth may we perceive with gratitude the preservation of all living things in nature as the gift of God : but also that in its motion, so recondite, so admirable, we may acknowledge the wisdom of the Creator. But whoever is too dull to receive this science, or too weak to believe the Copernican system without harm to his piety, him, I say, I advise that, leaving the school of astronomy, and condemning, if so he please, any doctrines of the philosophers, he follow his own path, and desist from this wandering through the universe ; and that, lifting up his natural eyes, with which alone he can see, he pour himself out from his own heart in worship of God the Creator,—being certain that he gives no less worship to God than the astronomer, to whom God has given to see more clearly with his inward eyes, and who, from what he has himself discovered, both can and will glorify God.”
—P. 145.

We may learn, from contrasting the fine spirit which breathes in these words of the sincere and pious Kepler, with the opposite temper which some other philosophers have displayed in their researches, that there are two ways of studying the phenomena of the material world. We have too often seen those who have engaged in that study, in order to build up some novel theory, and to gain the reputation of arduous and original thinkers, and who contemplate with self-satisfied pride the structure which they have reared. But these, while they investigate nature, are not adoring its author, but themselves, and their own skill and research ; they go into the temple of the universe, but they are so proud of unfolding its elaborate carvings, and deciphering its hieroglyphics, that they forget to worship and love the Lord of the Temple ; and the incense which they offer is to their own vanity, or to the wisdom of their species.

There is another way of studying nature—not presumptuous, and yet exciting, pursued with less self-complacency, but more delight. The firm believer in revelation examines the results of scientific inquiry, or himself “ opens the more inward explication of the form of the world ” as food for the reverence he would feel for his Father in Heaven. He is satisfied with the divine word, and, reposing on the promises therein contained, he is grateful

and happy. How can he better show his gratitude than by examining the wonders of the omnipotent hand, which, to make a dwelling-place for man, has hung over frowning mountains, and laughing fields, and rejoicing rivers, the ever-shifting and many-coloured canopy of the sky? He may meet with wonders he cannot fathom, and seeming contradictions which he cannot reconcile; but he looks at these as a child regarding some masterpiece of his father's skill, his uncertainty melting away into reverence, his perplexity swallowed up in admiration. He has a patient confidence that all is right and reconcilable, and that one day he will himself see how. Meanwhile, as he walks abroad in a world which, to his cultivated eye, is teeming with wonders, from the starry host above him, in their exquisite and almost tuneful regularity, making music to their Maker's praise, down to the smallest flower and insect on which he treads, pencilled and articulated with the most delicate care—each new development of complicated structure which he witnesses—each marvelously simple law which he unravels—each adaptation, each curious mechanism or strange chemical effect, affords fresh subject for humble adoration, and for genuine gladness of heart. To borrow the idea of the Christian poet, all the works of nature are peculiarly his, who can, without presumption, look upward and say with a smile of joy, "My Father made them all."

We have endeavoured to follow the train of Dr. Whewell's reasoning, and to connect some of the most characteristic extracts from his work. If we have failed in conveying an idea of the cogency of his general argument, at least we hope that the excellence of the passages cited may induce many of our readers to peruse for themselves this useful, and neither bulky nor expensive, volume.

ART. V.—*Eloge Historique de Joseph Fourier.* Par M. ARAGO, Secrétaire Perpétuel de l'Académie Royale des Sciences de l'Institut de France. Lu à la séance publique, du 18 Novembre 1833.

THE illustrious philosophers who flourished during the French Revolution, and who distinguished themselves either in legislation or in war, have, for some time, excited a very deep interest among the more intellectual portion of our countrymen. Denounced as the bitterest enemies of England—charged with the atrocities of the period in which they lived—and regarded as the apostles of infidelity and anarchy,—the heroes and sages of France have never been justly appreciated, or righteously judged. To have pronounced Napoleon a hero, and Carnot a sage, would at one time have been regarded as an act bordering on treason; and might have subjected to scorn, if not to persecution, the author of so daring a sentiment. Time, however, and the knowledge which it brings, have smoothed the asperities of national feeling; and the generation which has since arisen, has not caught from the pages of history the prejudices or the rancour of contemporary animosity. The bust of Napoleon now graces the halls and the libraries of British statesmen; and could Carnot and Fourier now visit the modern Carthage which they once strove to destroy, they would be received with the distinction due to genius, and the admiration inspired by patriotism.

Living, as we do, in insular security—governed by a popular dynasty, and under equal laws—we have, even yet, formed but an imperfect estimate of the sufferings and sacrifices of those distinguished men, who were hurried from their intellectual and peaceful pursuits into the tumult of devouring factions, or among the dangers of foreign war. If the soldier earns his name of glory by his prowess in the field, how bright must be the reputation of the sage who gives the vigour of his mind, and the strength of his arm, for the salvation of his country;—who, with the scaffold in view, rushes into the arena of inveterate passion to soothe and to guide;—and who, in the crisis of his nation's fate, exchanges the immortality of genius for the blood-stained laurels of war.

In those grave emergencies, when European hosts were marshalled to devour them, the Institute of France sent forth her intellectual conscripts to combine the elements of matter, and put in requisition the armoury of science, for the defence of their country. In that glorious campaign, which filled the arsenals of

France with the artillery of her enemies, and planted their captive standards in the dome of the Invalids, it was Carnot the academician and the geometer that led the heroes to triumph! When the munitions of war had failed, and the enemy counted upon victory, it was Chaptal and Fourcroy that made the French soil surrender its last atom of nitre for the manufacture of gunpowder—and Monge and Berthollet that converted into a formidable artillery the village bells that had rung the peasant to his gaieties, or summoned him to his prayers! Even Cuvier left his absorbing studies to array the population of the Rhine against the allied invaders; and the young and accomplished Meunier, quitted the pursuits of science to combat on the ramparts of Mayence, and sacrifice his life for his country!

But it was not from the ranks of science alone that France gathered the flower of her chivalry. Even the priesthood furnished its contingent; and hands which had administered the holiest rites of the sanctuary, did not scruple to grasp the sword, and bathe it in the invader's blood. Joseph Fourier, the distinguished subject of this article—the companion of Napoleon in Egypt—the Prefect of the Rhone, and the Perpetual Secretary of the Institute—would have spent his days in the humble guise of a Benedictine monk, had not the events of the French Revolution driven him into a higher and more glorious career. “The life of our colleague,” says M. Arago, in the eloquent and interesting *Eloge* before us, “was troubled and full of perils; it was spent amid the dangerous combats of the Forum—in the midst of the hazards of war, and a prey to all the anxieties of a difficult administration. That life we shall find intimately connected with the greatest events of our own day; and we hasten to add, that it will always be found just and honourable, and that the personal qualities of the philosopher will add lustre to his discoveries.”

Jean Baptiste Joseph Fourier was born at Auxerre on the 21st March 1768, of a family originally from Lorraine. His grand-uncle, Pierre Fourier, the reformer and general of the Order of Premonstrants, did honour to the clerical profession by his virtues; and established a congregation of females, who added to the three vows of the Religious that of teaching the children of the poor. Having lost both his parents before he was eight years of age, Fourier's pleasing manners and amiable disposition attracted the notice of a lady, who recommended him to the Bishop of Auxerre, and through his influence he was admitted into the military school, then under the superintendence of the Benedictines of the Congregation of St. Maur. Here he made the most rapid progress in his studies; and so great were his acquirements, that, at the age of twelve years, he composed several sermons, which were preached with great applause at Paris, by some of the high dignitaries of the Church. At the age of thirteen he entered upon

his mathematical studies; and such, says M. Arago, was his ardour in pursuing them, "that he was not satisfied with the regular hours of labour, but carefully collected the ends of candles from the kitchen, the corridors, and the refectory of the college, to light him in those studies which were the prelude to works which, a few years afterwards, did honour to his name and his country." In a military school under the management of monks, the Church or the profession of arms were likely to be the careers between which the pupils would be divided. Fourier wished to be a soldier; but when he applied for permission to be examined for the artillery, under the patronage of the illustrious Legendre, the Minister replied, "that as Fourier was not noble he could not be admitted into the artillery, even if he were a second Newton!" Under a feeling of righteous indignation at so ignoble a sentiment, M. Arago makes the following eloquent appeal to his colleagues:—

"There is, gentlemen, in the judicial execution of rules, even when they are most absurd, something commendable, which I am willing to recognise. But in this circumstance, nothing can be more odious than the words of the Minister. It is by no means true that no person was admitted into the artillery but those who had the title of nobility; for a certain amount of fortune often supplied the want of parchments;—so that it was not something indispensable which young Fourier wanted, but an income of a few hundred livres, which the men then placed at the head of the country would have refused to consider an equivalent for the genius of a second Newton! Let us preserve these remembrances, gentlemen; they admirably mark out the immense career which France has run through during the last forty years. Our children, too, will see in them, not the excuse, but the explanation, of those bloody disorders by which our first Revolution was disgraced."

Thus prevented from wearing the sword, Fourier assumed the habit of the Benedictines, and repaired to the Abbey of Saint Benoît-sur-Loir, where he purposed making his noviciate. But he had scarcely pronounced his vows when, in 1789, every mind was led astray by the seducing ideas of the social regeneration of France. Fourier abandoned the profession which the injustice of the Government had compelled him to choose, and was elected by his ancient masters to fill the principal mathematical chair in the Military College of Auxerre. In this situation he justified the confidence which his colleagues had placed in him: And such was the universality of his powers, and the readiness with which he could exercise them, that when any of his colleagues were indisposed, he taught the classes of rhetoric, history, and philosophy; and whatever was the subject of his lecture, he delighted his audience with the treasures of his varied and profound learning, adorned with all the graces of the most elegant diction.

Before he had completed his twenty-first year, Fourier had composed an original and profound memoir, *On the Resolution of Numerical Equations of all Degrees*, and towards the close of 1789, he went to Paris, and read it before the Academy of Sciences, then about to assume another name, and to enter upon a brighter career. This branch of algebraic analysis, so important both in astronomy and physics, had exercised the genius of Descartes, Hudde, Newton, Maclaurin, Bernouilli, Euler, Lagrange, Budan, Fourier, Du Gua, Bret, Véné, Cauchy, Horner, and Sturm. Lagrange, as our mathematical readers know, had given general methods of solving equations, applicable in all cases, but requiring, in practice, the most intolerable calculations; and it was thus left to future analysts to discover the purely arithmetical process which, when applied to the numerical co-efficients of the equation, would answer for equations of all degrees. This great object has been effected by the united and independent labours of Budan, Fourier, Horner,* and Sturm, and their methods have been recently simplified and improved by Professor Young of Belfast.

As in every other important discovery, questions of priority have in this case been raised; and the late M. Navier, the editor of Fourier's work on Equations, has claimed for his countryman the priority even of publication. The evidence, however, which he adduces, consists in the testimony of professors of the University, and of pupils of the Polytechnic School, that Fourier had drawn up his theory in MSS. so early as 1797, ten years before the appearance of Budan's work,† and that he had explained it in his public lectures at the Polytechnic School in 1803. "But," as Professor Young remarks, "testimony of this kind must always be deficient in distinctness, as to the precise character and extent of the communications made, which so eminently belongs to the printed publication of them." Several English writers have very unjustly overlooked the prior claim of Budan to the leading theorem, although they ought to have known that both Lagrange and Legendre, the reporters upon Budan's Memoir, and also Fourier's colleagues, regarded that theorem as due to Budan;‡ and we think

* The improvements of Horner will be found in the *Phil. Trans.* 1819.

† *Nouvelle Méthode pour la Résolution des Equations Numériques*, 1807.

‡ This is very obvious from the following passage, which Professor Young has quoted from Montucla, or rather La Lande, the editor of the volume in which it occurs, and which appears to have escaped the notice of Navier, and the other friends of Fourier:—"Je ne puis passer sous silence un Mémoire sur la Résolution des Equations, par le Cit. Fourier, ancien Professeur de Mathématiques au Collège de Tonnerre, qui s'est aussi spécialement occupé de cette démonstration; il en donne deux, l'une géométrique et fondée sur la considération des courbes ci-dessus, l'autre purement analytique, et fondée sur des principes différens de ceux de l'Abbé de Gua. Ses recherches le conduisent à beaucoup d'autres vérités utiles, qu'il est juste qu'il publie lui-même le premier."—*Hist. des Mathématiques*, tom. iii. p. 30. 1802.

that Professor Young, induced by the fact that Fourier's investigations were independent of those of Budan, has sacrificed his own opinion to too great an extent, when he says that "the fairest way would be to consider the theorem in question as the common property of Budan and Fourier." To such a compromise we cannot agree, and therefore greatly prefer the decision of M. Arago.

"We should observe," says he, "that the theorem which is the basis of Fourier's method, was first published by Budan; and that in accordance with a rule which the principal academies of Europe have solemnly sanctioned, and which the historians of science cannot depart from without falling into confusion, M. Budan ought to be considered as the inventor."

The great merit and originality of Sturm's* beautiful and infallible theorem for determining not only the simple limits, but also the exact number of roots of any equations whatever, which are comprehended between two given quantities, has never been questioned. Its absolute infallibility and freedom from all tentative processes, gives it a theoretical superiority over all others; but it has the disadvantage of requiring the same amount of numerical labour for easy, as it does for difficult equations. Professor Young is of opinion that his modifications of Fourier's method will contribute to bring it into more general use in the analysis of the higher equations, where, owing to the magnitude of the co-efficients, the method of Sturm may involve inconveniently large numbers.

On the return of Fourier to his native town, he found the whole population of Auxerre and its vicinity intensely excited with the great questions of philosophy, politics, and the dignity of man, which were then debated by the orators on different sides of the National Assembly. To this intellectual movement he willingly surrendered himself, embracing with the enthusiasm of genius, the principles of the Revolution, and taking a part in every measure, just and generous, which the popular excitement brought before him. At the peril often of his life, he accepted missions of the most difficult and delicate kind, but never with the low, avaricious, and sanguinary spirit which was displayed everywhere around him. As a member of the popular society of Auxerre, Fourier acquired an ascendancy almost irresistible. When 300,000 men were about to be raised, he made such an

* Sturm's method obtained the prize of the Royal Academy of Sciences in 1834. Professor Young states that he was also rewarded with a gold medal, by the Royal Society of London, in 1840; but we cannot find any such adjudication recorded. Sturm's Memoir appears in the *Mém. des Savans Etrangers*, 1836.

eloquent address to the people of Burgundy, and provoked so many voluntary enrolments, that the drawing of lots became unnecessary. "At the voice of the orator," says M. Arago, "the contingent demanded from the chief place of the department of Yonne, formed itself spontaneously on the spot where the meeting was held, and marched instantly to the frontier." In recording such noble instances of enlightened patriotism, M. Arago passes a just and severe censure on the ridiculous and absurd motions which, in such popular assemblies, threw discredit upon the great cause which every good citizen had so deeply at heart. In the very same locality where the eloquence of Fourier had excited such noble sentiments, he was on one occasion obliged to oppose the plans of a well-meaning orator, who, unwilling to leave any thing to the determination of the municipal authorities, insisted that the names of the quarters of *north, south, east, and west*, should be assigned by lot to the different parts of the town of Auxerre!

"Literature, the fine arts, and the sciences," says M. Arago, "seemed for a while to experience the happy influence of the French Revolution. See, for example, with what breadth of ideas was conceived the reform of weights and measures;—upon what vast operations it was resolved to found it;—what geometers—what astronomers—what eminent natural philosophers presided over every part of this great work! But, alas! frightful civil distractions soon overshadowed this magnificent spectacle. The sciences could not prosper amid the bloody strife of faction. They would have blushed to have owed any thing to those men of blood whose blind passions sacrificed the Sarons—the Baillys—and the Lavoisiers."

Some months after the events of the 9th Thermidor, the French Convention were anxious to restore peace to their distracted country, and as the readiest and most effectual means of effecting so great an object, they resolved to organize a system of public instruction. The means were at their command, but where were the men? The religious bodies, the depositaries of learning, had been suppressed, and had almost all left their country. The lay teachers had become officers of artillery or engineers, and were defending France on its frontiers: But notwithstanding these difficulties, the resources of patriotism proved omnipotent. The Convention decreed that professors should be created without delay, and the *Normal School* sprung into existence. Fifteen hundred citizens of every age, chosen by the chief places of the district, were brought together to study under the best masters, the art of instruction. Fourier was one of this renowned band; but, in the fickleness of popular affection, and under the influence of political calumny, he was elected by the town of St. Florentin, and not by his native city of Auxerre.

"This indifference to one of the most illustrious of her sons," says M. Arago, "will be understood when I remind you, that, after the 9th Thermidor, the capital, and chiefly the departments, were a prey to a reaction blind and disorderly, as all political reactions are;—that crime usurped the place of justice;—and that excellent citizens—that pure, moderate, and conscientious patriots, were daily persecuted by bands of hired assassins, before whom the population stood mute with terror. Such, gentlemen, were the formidable influences which for a while deprived Fourier of the suffrages of his townsmen, and slandered him as a partizan of Robespierre—him whom St. Just, alluding to his mild and persuasive eloquence, called a *Patriot in music*;—him whom the Decemvirs threw so often into dungeons;—him who in presence of the revolutionary tribunal gave the aid of his fine talents to the mother of Marshal Davoust, charged with the crime of having sent money to the emigrants;—him who at Tonnerre had the incredible audacity to lock up at an inn an agent of the Committee of Public Safety, in order to protect an honourable citizen whom he was about to arrest;—him, in short, who attacked in personal conflict the sanguinary proconsul before whom all Yonne trembled, denounced him as a madman, and obtained his recall! Such, gentlemen, are a few of the acts of patriotism, self-devotion, and humanity which signalized the early youth of Fourier. They were, as you have seen, repaid with ingratitude. But ought this to surprise us? To expect thanks when they cannot be given without danger, would be to mistake human frailty, and to expose ourselves to frequent disappointments."

In a very interesting account of the Normal School thus established by the Convention, and of the great revolution which it effected in the study of pure mathematics, M. Arago has mentioned some curious facts regarding the choice of professors, during the ancient regime, and contrasted them with those which marked the brighter days of the Revolution. With a very few exceptions, the distinguished Frenchmen who really cultivated science, and contributed to its advancement by their inventions and discoveries, constituted a class totally distinct from the class of professors who occupied the chairs in her universities. But when these appointments fell into the hands of the Convention, a new and nobler principle guided them in their choice; and in nominating to professorships the first geometers—the first natural philosophers—the first naturalists in the world, they shed a new lustre over the functions of public teachers, from which France has ever since derived the most important benefits. "In the eyes of the public," says M. Arago, "a title which was borne by the Lagranges, the Laplaces, the Monges, and the Berthollets, justly became equal to the finest titles. If, under the Emperor, the Polytechnic School reckoned among its working professors counsellors of state, cabinet ministers, and even

the President of the Senate, we may seek the cause of it in the impulse which was given by the Normal School.*

In continuing his very interesting account of the Normal School, M. Arago contrasts the teaching of the ancient professors with that of their successors, in the schools of the Convention.

"Mark," says he, "in the ancient great colleges, the professors to a certain degree hid behind their papers, reading in a chair, amid the indifference and inattention of their pupils, discourses laboriously prepared, and which were annually reproduced without change. Nothing like this existed in the Normal School. Oral lectures were alone permitted. The authorities even required, from the illustrious individuals charged with the duties of instruction, a formal promise that they would never repeat lectures which they had committed to memory. From that time the professor's chair became a tribune, where the lecturer, identified as it were with his audience, saw in their deportment—in their actions—and in their countenances, sometimes the necessity of getting forward, sometimes, on the contrary, the necessity of returning upon his steps, of awakening attention, by some incidental observation, or of clothing in a new form the thought which, when first expressed, had left in suspense the minds of his audience. And do not suppose that those fine improvisations with which the amphitheatre of the Normal School resounded, remained unknown to the public. Short-hand writers, paid by the State, took them down. The manuscript, after being revised by the professors, was sent to 1500 pupils, to the members of the Convention, to the consuls and agents of the Republic in foreign countries, and to all the administrators of districts. Compared with the parsimonious and stingy practice of our times, this was certainly prodigality. And there is nobody that would not give an echo to this reproof, slight as it may appear, were I permitted to point out in this place an illustrious academician to whom the lectures of the Normal School revealed his mathematical genius in an obscure capital of the district in which he lived."

It is impossible to read these interesting details, so little known in this country, without observing how accurately the description of the old French professors applies to the men who have filled the chairs in our universities during the last fifty years. Excepting in our metropolitan institution, and only recently there, personal and political influence have generally overborne the claims of genius and learning, and placed in the position of academical instructors men utterly unqualified for the duties

* A foreign philosopher, the late Professor Möll of Utrecht, in a controversial pamphlet, containing opinions of French institutions, that are far from being liberal or just, has stated, "that the establishment of the Normal School in Paris, though of short duration, was perhaps of more utility towards the extension of mathematical knowledge, THAN ALL THE UNIVERSITIES OF EUROPE TOGETHER."—*On the alleged Decline of Science in England.* By a FOREIGNER. London, 1831. See also *Edinburgh Journal of Science*, vol. v., p. 336. New Series, Oct. 1831.

they had to discharge—without genius—without even industry—without an adequate knowledge of the truths they had to teach, and utterly unknown beyond the parliamentary limits of the burgh which they overshadowed. So profligate, indeed, was the exercise of patronage, that men were nominated to academical chairs who had never studied the subjects on which they had to lecture, and who owed their appointment either to family ties, or received it as the wages of political subserviency. In some cases, where conscience held a slight rein over the patron, experience in teaching was sought for as the only qualification of the candidate, and respectable individuals were thus transferred from a sphere which they adorned to a sphere which they dishonoured. The slender scientific attainments which sparkled in a school, or the still more evanescent literature which adhered to ecclesiastical office, were thus summoned to expound the discoveries of Newton, Laplace, and Fresnel, or to teach the philosophy of Bacon, and Locke, and Berkeley. Lectures gleaned from encyclopædias, or popular digests of knowledge, or drawn perchance from well-thumbed homilies that had performed biennial functions in the pulpit, or instilled moralities into synodical and general assemblies, formed the intellectual manna that was thrown down to genius in the wilderness. The fruits of such a system of instruction were such as might have been anticipated. Science languished and literature declined—and but for a few stars in the metropolis, these lights of the world would have been utterly extinguished in our native land. Men of genius from English universities, whom the tests of a dominant Church had excluded from competition, were received with open arms into our metropolitan institution, while the tottering establishments in the provinces maintained them in full force, to insure the admission of unscrupulous aspirants, pledged to the support of the abuses and corruptions upon which they thrive.

A system of patronage so odious in its character, and so vicious in its results, could not long survive the reform in our political institutions. It has already begun to yield to the moral pressure of the age, and without the second-sight, we see its downfall in the establishment of three Irish colleges, unfenced by the Shibboleth of party, and opening their arms in wide embrace to the genius and learning of the empire. The minister to whom we owe these noble institutions, has earned for himself a reputation which will be embalmed amid the science and literature of his country; and when time has robbed faction of its sting, and party of its bitterness, Sir Robert Peel will be recognized as the first Premier that patronised the arts and sciences, and will be honoured with an exalted place among the Colberts of another age. Let him extend to the universities

of Scotland the same liberality and support—let him incorporate the science and literature of England into an Imperial Institute, like that which adorns France and every other European state—and he will enjoy, in his own day, that true glory which he has acknowledged to be the great object of his political labours.

We have been led into these observations by M. Arago's interesting contrast of the ancient professors of France, with their successors under the Convention; and as the subject is one of national importance, and bearing upon the pacification of a sister land, we trust our readers will excuse us for quoting a few lines, in which, more than ten years ago, we recommended the general policy which has been so wisely pursued by the present Government, and which we trust they will carry out to its full and legitimate extent. "Amid the subversion of ancient institutions, whether established by despotism, or deformed by corruption, the elements of society are let loose from their forced arrangements, and in obedience to their natural affinities, they enter into new and less constrained combinations. Kindred minds unite their sympathies for good or for evil. Daring and restless spirits conjoin their physical powers of mischief. Wealth seeks its preservation by uniting itself to wealth, and power strives to extend itself by an alliance with power. But when the transfer of the social elements is over, and the ebullition which accompanies it has subsided, we are permitted to see the powers that have been in exercise, and the products which they have formed. In such political movements, wealth and rank have frequently exercised a predominant influence; and brute force has still oftener enjoyed its short-lived triumph; but intellectual power, the weapon of virtuous and educated minds, has never failed in establishing its just and inalienable rights. When this irresistible auxiliary is allied with the ambition of the despot—when it guides the schemes of an unprincipled oligarchy—or when, in its individual action, it gives birth to theories of wild import, directed against the peace and happiness of man, it may, as it has done, exercise a baneful influence over civil and religious liberty: but even then its ascendancy is only temporary. It perishes at an elevation where it cannot breathe, and its inspirations are only deep and strong in the humbler level of reason and justice. * * * * Great as have been the improvement of our social institutions, Europe has not yet achieved in any of her states the blessed triumph of a paternal government. The events which now agitate England, indicate her distance from so glorious a consummation. While the interests of a great country are frequently and suddenly transferred from one set of statesmen to another, of opposite principles, neither can the people be happy, nor the nation prosperous. The minister, indeed, who shall first obtain for his

country the blessing of a stable government, must summon into his service the intellectual might of England. He must banish ignorance from its strongholds; and privileged power and democratic violence will soon follow the culprit into exile. The education of the people, and the diffusion of knowledge, the encouragement of literature and science, and talent of every kind, are the only ballast for a government like ours, exposed to the double hostility of popular menace and aristocratic inroad. But of all these elements of stability, the most efficacious is that of intellectual power, whether it be exhibited in the statesman's forethought and sagacity—in the philosopher's power of combination and judgment—or even in the lighter and more elegant accomplishments of the scholar and the poet. The shaft of the stately column is not weakened by the acanthus which curls at its summit, nor is the reason less enlightened when it derives a ray from the imagination. Intrenched in such defences, an honest administration could never be dislodged, and the blessings of the people, and the respect of foreign states, would give it fresh vigour and endurance. A Government thus constituted could devote the time now wasted in its own preservation to the real business of the state; and *local legislation*, or the adjustment of the laws to the varying localities and conditions of the different parts of the empire, would receive that attention which it has never yet met with from a British Parliament."

We left Fourier in Paris a member of the Normal School, in which he soon occupied a distinguished place. On the establishment of the Polytechnic School, he was appointed superintendent of the Lectures on Fortification: He was afterwards charged with the course of mathematical analysis, and in the discharge of these duties he acquired a high reputation by the perspicuity, the erudition, and the elegance of his lectures. It is much to be regretted that these interesting specimens of his talents have not been collected, and that only one of his lectures, namely, *On the Principle of Virtual Velocities*, has been preserved in the Journal of the Polytechnic School.

The great events with which Europe was now agitated, opened up a new field for the exercise and display of the talents of Fourier. The peace of Leoben in 1798, between Austria and France, brought back to Paris the illustrious men by whom it had been achieved. Satiated with the triumphs of war, Bonaparte and Desaix courted the society of their distinguished countrymen, and were occasionally found in the amphitheatre of the Polytechnic School, along with the professors and the pupils of that celebrated seminary. This conference between philosophers and heroes foreshadowed some great scheme, in which conquest and civilization were to be combined; and we accordingly

find that the subjugation and regeneration of Egypt was the object which they had in view. While Bonaparte was ambitious of the glory which such an enterprise was likely to yield, the Directory was actuated with the less noble motive of removing from Paris the conqueror of Italy, and putting an end to the popular demonstrations with which he was everywhere greeted.

After triumphing over the choicest of European armies, the mere conquest of Egypt could never have been the impelling power which led Bonaparte to quit the country where he was idolized.

"He desired," says M. Arago, "to restore to Egypt its ancient splendour; he wished to promote its cultivation, to perfect its system of irrigation; to create new sources of industry; to open up new outlets to commerce; to succour an unfortunate population; to deliver them from the degrading yoke beneath which they had groaned for centuries; and, in short, to confer upon them without delay all the blessings of European civilization. Such great designs could not have been accomplished by the mere power of an ordinary army. It became necessary to appeal to the sciences, to letters, and to the fine arts, and to call in the aid of men of talent and experience. Monge and Berthollet, both members of the Institute, and professors in the Polytechnic School, became for this purpose the recruiters for the expedition. Did our colleagues really know the object of this expedition? I dare not affirm it; but I know that they were never permitted to divulge it. We go into a remote country; we shall embark at Toulon; we shall be constantly with you; General Bonaparte will command the army:—Such was in reality and in form the limited circle of confidence which had been imperiously traced out for them. On the faith of words so vague, with the risk of a naval fight—with English pontoons in the perspective, let any one try in the present day to enlist the head of a family—a philosopher already known by his useful labours, and placed in some honourable position—an artist in possession of the esteem and confidence of the public—and I am greatly deceived if he will obtain anything else but refusals; but in 1798 France had just emerged from a terrible crisis, during which its very existence had been frequently put in peril. Who but for this would have exposed themselves to such imminent dangers? Who could have expected to see with his own eyes enterprizes so truly desperate brought to a happy issue? We need no other explanation of that adventurous character—of that absence of all concern for to-morrow which appear to have been the most prominent traits of the Directorial epoch. Fourier accepted with hesitation the propositions which were brought him by his colleagues from the General-in-chief: He quitted the duties which he so highly valued, of a professor in the Polytechnic School, to go—he knew not where; to do—he knew not what!"

After landing his troops, and obtaining possession of Lower Egypt by the battle of the Pyramids, Bonaparte organized the *Institute of Egypt*, with a view of accomplishing the great plan of

civilization which he contemplated. It consisted of forty-eight members, and was divided into four sections. Monge was appointed its first President. Malus and Geoffroy St Hilaire were among its members. Bonaparte, as at Paris, belonged to the mathematical section, and the office of Perpetual Secretary was, by the free choice of the Society, given to Fourier. In this important position Fourier devoted himself to the most interesting researches, and read to the Institute many valuable memoirs. The examination of the objects around him did not interfere with his mathematical pursuits, and while he was extending the boundaries of algebraical analysis, he was engaged in statistical and antiquarian researches, connected with the history and monuments of Egypt. Political cares, however, soon interfered with the peaceful labours of science; and such were his talents, his knowledge of character, and his inflexible justice, that he was appointed commissary between the General-in-chief and the Egyptian aristocracy—the Sheiks and the Ulemas of Cairo. When the Emir Hadgy, whom Bonaparte had made Prince of the caravan, escaped during the Syrian campaign, there was reason to believe that four of the Sheiks were parties to the treason. On his return to Egypt, Bonaparte intrusted to Fourier the investigation of this serious affair. “Do not propose to me,” said he to his commissary, “any half measures. You have to pass sentence upon great personages. You must either cut off their heads or invite them to dinner.” On the day after this conversation, the four Sheiks dined with the Commander-in-chief, and Solyman el Fayoumi, the principal Ulema, ever afterwards manifested his gratitude for this act of generosity.

The services of Fourier as a diplomatist and a judge, were also put in requisition. When Mourad Bey offered to treat with Kleber, Fourier negotiated the treaty with Mourad’s wife, the beautiful Sitty Neficah, who was already celebrated from one extremity of Asia to the other, on account of the bloody revolutions which her unrivalled charms had effected among the Mamelukes. Fourier was also charged with the negotiation for the capitulation of Heliopolis, which the Janissaries had defended from house to house with the most heroic courage. The terms were discussed in a house half ruined by balls and grape-shot. In the very thick of the fight, when Fourier was enjoying the hospitality of the Turkish commissary, a shower of musket balls entered the house, and a ball passed through the coffee-pot which Fourier held in his hand. “Without calling in question any person’s courage,” says M. Arago, “do you not think, gentlemen, that if diplomatists were generally placed in positions so perilous, the public would have little reason to complain of their proverbial slowness?”

When Desaix had completed the conquest of the Upper country, Bonaparte appointed two commissioners for exploring the monuments of Egypt. Fourier and Costaz were at the head of this commission, and with the aid of a military force, they performed the various duties which were assigned them, now making astronomical observations, now studying the geology of the country, now measuring its mighty edifices—the magnificent temple of Tentyris, and the wonderful monuments in the mysterious island of Elephantia.

These interesting pursuits, however, were now interrupted by unlooked for calamities. Satiated with fruitless victories, and despairing of the accomplishment of the grand objects which he had at first contemplated, Bonaparte conceived new schemes of ambition, and saw in the popular enthusiasm of his countrymen the means of effecting them. In the month of October, 1797, he quitted Egypt with his principal friends, and embarking in the frigate *Muron*, he landed in France, to the astonishment of all Europe. Fourier was a hundred leagues from the shore when the frigate sailed, and was thus left behind with his friend General Kleber, to whom Bonaparte had intrusted the command of the army. This distinguished officer evinced the warmest attachment to his scientific friend, and but for an event of the most distressing nature, the army of Egypt might have surmounted the difficulties with which it had to struggle. After having spent the 14th of June in the island of Raonda, in reviewing a body of Greek troops which he had organized, General Kleber returned to Cairo to inspect some improvements which he had been making on his hotel. While walking on the terrace in his garden, a young Turk from Aleppo, whose name was Solymán, came up to him, and while receiving from the hero of Heliopolis a promise to redress his pretended grievances, he plunged his poniard four times into the breast of his benefactor. Thus fell a truly great soldier, whom his enemies had ever feared, and his friends ever loved. Fourier, and the colony over which he wielded almost a sovereign power, were inconsolable for the loss of their chief. Even the Egyptians mixed their tears with those of the French soldiers, and the Mahometans never ceased to boast that the assassin and his three accomplices had not been born on the banks of the Nile. The French army resolved to celebrate the funeral of their commander with the highest pomp, and by their unanimous consent the honourable and perilous task of pronouncing the eulogy of the deceased was intrusted to Fourier. Of this interesting event, M. Arago has given the following eloquent account :—

“ It was on the breach of the bastion recently carried by the assault of our troops ; in view of the most majestic of rivers ; of the magnifi-

cent valley which it waters ; of the frightful desert of Libya ; of the colossal pyramids of Gizeh ; it was in the presence of twenty populations of different origins which Cairo embraced in its vast circuit ; it was before the bravest soldiers that ever trod the land, where the names of Alexander and Cæsar were still heard ; it was in the midst of all that could stir the heart, elevate the mind, and excite the imagination, that Fourier unfolded the noble life of Kleber. The orator was listened to with religious silence, when suddenly pointing to the soldiers ranged in battalions before him, he exclaimed, ' Alas ! how many of you would have aspired to the honour of throwing himself between Kleber and his assassin ! I take you to witness, intrepid cavalry, who ran to save him on the heights of Koraim, and dispersed in an instant the crowd of enemies who were about to surround him ! ' At these words an electric cry convulsed the whole army :—the standards drooped ;—the ranks pressed on each other, and their arms clashed together ;—a deep and continued groan escaped from some thousands of breasts torn by sabre and shot, and the voice of the orator was lost in the sobs of distress.

" A few months afterwards, on the same bastion, and before the same soldiers, Fourier celebrated, with no less eloquence, the virtues and exploits of General Desaix, whom the conquered tribes of Africa saluted with the flattering name of the *Just Sultan*, and who sacrificed his life at Marengo, in order to secure the triumph of the French arms."

After the battle of Alexandria in 1801, and the capitulation of the French army under General Menou, Fourier returned to France along with 23,000 French troops, and several hundreds of the natives of both sexes. To compensate for the military failure of the expedition to Egypt, the Institute of Cairo resolved to show the world that they had effected many of its grander objects ; and when the heroes that conquered and the heroes that fell have been forgotten, or reduced to their true level by a Christian appreciation of the man that sheds blood, Fourier, Monge, Berthollet, Malus, and Denon—men who displayed the heroism of the soldier in performing the acts of the sage—will be emblazoned in that temple of peace and knowledge, in which the spear and the sword shall resign their bloody functions, and where the *moth* shall be the only enemy that can assail the captive standard, and the *rust* the only stain that can spot the fatal steel.

When the great work on Egypt was projected, the editorial duties were intrusted to Fourier. He was to arrange and combine its separate treatises, and to draw up a general introduction to the work ; and he accomplished this arduous task during the first eight years of his residence at Grenoble. This great work was published at Paris in 1810, under the title of *Discours préliminaire servant de Préface Historique au grand ouvrage sur l'Égypte*. It has been regarded as one of the finest monuments of the French language, remarkable for its method

as well as for its eloquence, and particularly distinguished by the beauty of its style, which Fontanes characterizes as *uniting the graces of Athens with the wisdom of Egypt*. After unfolding in a few pages the leading features of the government of the Pharaohs, and the results of the subjugation of ancient Egypt, by the kings of Persia—the Ptolemies—the successors of Augustus—the Emperors of Byzantium—the first Caliphs—the celebrated Saladin—the Mamelukes and the Ottoman princes;—he recounts the schemes of St. Louis for the conquest of Egypt;—refers to the proposal made by Leibnitz to Louis XIV. to subjugate that country, and then traces with great care the different phases of the French expedition, striving to prove—what is not now the general opinion of his countrymen—that it was just and legitimate. “If, in 1797,” says M. Arago, “our countrymen had been exposed at Cairo or at Alexandria to outrages or extortions which the Ottoman government neither wished nor knew how to repress, we might safely admit that France was entitled to do justice to herself, and that she had the right to send a powerful army to bring the Turkish custom-house officers to their senses. But it is a very different thing to maintain, as Fourier does, that the Divan of Constantinople ought to have favoured the French expedition; that our conquest tended in *some degree* to restore Egypt and Syria to the Porte—and that the capture of Alexandria and the battle of the Pyramids *would add to the lustre of the Ottoman name!*”

Though bearing Fourier's name, these opinions were not his. M. Arago justly ascribes them to the *exigencies of politics*, and frankly tells us, that “behind certain sophisms were discerned the hand of the famous General-in-chief of the army of the East!” Napoleon was indeed commonly supposed to have had a hand, either directly or indirectly, in the composition of Fourier's preface; and M. Arago has had the good fortune to discover incontrovertible evidence of the truth of the surmise. The first proof-sheets of the Historical Preface were sent to the Emperor, who was anxious to peruse them before reading them over with Fourier. These proof-sheets, which M. Champollion Figeac put into M. Arago's hands, are covered with marginal notes, and the additions which these rendered necessary amount to nearly a third of the original discourse. In these sheets, and in the work itself, all proper names are cancelled, excepting those of the three generals-in-chief. Everywhere, indeed, in these sheets, we see traces of the miserable feeling of jealousy to which Napoleon lent himself. It is true, however, that in pointing with his finger to the word *illustrious*, applied to Kleber, the Emperor said to Fourier, “*Some person made me remark THIS EPITHET;*” but after a brief pause he added, “*It is agreed that you leave it*

thus, for it is just and well deserved." "These words," says M. Arago, with his noble indignation against injustice, "do less honour to the monarch, than they disgrace the '*some person*,' whom I regret I cannot otherwise name;—one of those vile courtiers who spend their lives in spying the weaknesses and bad passions of their masters, in order to make them the stepping-stones to honours and to fortune."

Desirous of rewarding the services of Fourier, the First Consul offered him, through Berthollet, the Prefecture of the Department of Isère; and having cheerfully accepted this important office, he was, in the 34th year of his age, established as Prefect at Grenoble, on the 2d of January 1802. His name was also placed in the list of the Legion of Honour as soon as it was created, and in 1808, he received the rank of Baron with a pension. In this new and responsible situation, Fourier performed the difficult task of mingling the pursuits of science with the systematic and faithful discharge of his public duties. These duties were of a very grave and responsible nature.

"Ancient Dauphiny," says M. Arago, "was then a prey to the most ardent political dissensions. The Republicans, the partizans of emigration, and those who were ranged under the banners of the consular government, formed as many separate sects, between whom all intercommunion seemed impossible.—Impossible, do I say, gentlemen—Fourier effected it. His first anxiety was to have the hotel of the prefecture considered as neutral ground, where each individual could show himself without even the appearance of concession. From curiosity alone a crowd at first assembled; but the crowd returned—for in France one seldom deserts the saloons where there is a host polite and kind, spiritual without fanaticism, and learned without pedantry. When Fourier's opinions respecting the high antiquity of the Egyptian monuments were first broached, they excited lively apprehensions in the minds of the Catholics; but when it became known that the new prefect numbered a saint in his family—and that the blessed Peter Fourier, the founder of the Religious of the congregation of Notre Dame, was his grand-uncle, their apprehensions ceased, and a friendship was formed which the indomitable respect of the first magistrate of Grenoble for all conscientious opinions cemented more and more."

Having thus acquired the confidence of all parties, Fourier devoted himself to the proper duties of his office. Among the great public works which he promoted was the superb road over Mont Genève from Turin to Grenoble, and the draining of the marshes of Burgundy. By his perseverance, and tact, and skilful management, he prevailed upon thirty-seven municipal bodies to subscribe to the Burgundian drainage, which has covered with a happy population an immense territory, where the traveller durst scarcely halt even for a few hours.

In his influential position at Grenoble, Fourier had an opportunity, under very interesting circumstances, to perform a great duty to literature and science—to preserve for them the celebrated Champollion. Of this event, M. Arago gives the following interesting account:—

“Champollion, the young Professor of History in the Faculty of Letters at Grenoble, had just reached his 20th year. He was chosen by lot to carry the musket. Fourier granted him exemption, on the ground of his having had at Paris the title of an élève of the school of oriental languages. The minister of war having learned that the pupil had given in his demission, denounced the exemption as a fraud, and issued a thundering order of departure, which seemed to preclude the very idea of an appeal. Fourier, however, was not discouraged: His measures were skilful and urgent; and he at last drew up so animated a description of the precocious talent of *his young friend*, that he wrested from power a special decree of exemption. It was not easy, gentlemen, to obtain such success. At the very same time a conscript, a *member of our academy*, could only obtain a revocation of his order of departure, by declaring *that he would follow on foot, and in the costume of the Institute*, the contingent of the arrondissement of Paris in which he was classed.”

Amid the engrossing duties of his position, Fourier found leisure for his literary and mathematical pursuits. His principal writings indeed date from Grenoble, and it was there that he composed his *Mathematical Theory of Heat*—a work which is entitled to a place not much lower than the *Principia* of Newton, or the *Mécanique Céleste* of Laplace. The discoveries which it contains are of a most interesting kind, and capable of being to a considerable extent made intelligible to a general reader.

When a ball of iron is made red hot, the fluid or substance which makes it hot is called *heat* or *caloric*. When bodies with different degrees of heat are placed near one another, the coldest becomes warm, and the warmest cold, till after a certain time they are all equally hot. The heat which passes from the hot to the colder ball, is called *radiant heat* or *caloric*. The academicians Del Cimento found that *radiant heat* could be reflected like light, and concentrated like light in the focus of a concave mirror. Mariotte some time afterwards found that there were *two kinds of radiant heat*, namely, that which accompanies the sun's rays, and which traverses all transparent bodies as easily as light, while the heat of a hot ball is almost wholly stopped in passing through the most transparent glass. No discovery of importance regarding heat was made in Europe till our distinguished countryman, Sir John Leslie, proved *experimentally* that the intensity of the heat radiating from the surface of a hot body varies with the sine of the angle which the radiation forms with that surface, the *maximum* emission taking place when the

heat radiates in a line perpendicular to the surface, and the *minimum*, when it radiates in a direction parallel to the surface. This result, however, was still liable to doubt, as the experiments were not sufficiently precise to give it the character of demonstration. Fourier, however, removed this doubt, not by his experiments, but by his analysis. He not only demonstrated the law of the sines, but determined its physical cause. He supposes that bodies radiate heat not only by their superficial molecules, but also by their interior molecules; and he supposes also that the heat of the inner molecule cannot reach the surface but by traversing a certain thickness of matter, without experiencing any loss or absorption. By combining these two hypotheses analytically, he obtains a mathematical expression of the law of the sines. "The two hypotheses, therefore," M. Arago remarks, "being thus justified, become laws of nature; and develop in heat hidden properties which could only be perceived by the eyes of the mind."

In discussing the heating of closed spaces, Fourier was led to very valuable results. If the body which enclosed the space were kept at the same temperature, there can be no doubt that every point in that space would also have the same temperature, namely, that of the enclosing body. But Fourier has shown that if the radiant heat had the same intensity in all directions, and if this intensity did not vary with the sine of the angle of emission—then the temperature of a body situated within the space would depend on its position, and the *temperature of boiling water*, or that of *melted iron*, might exist in certain points of a hollow ball of ice!!

From the formula which gives the temperature of different parts of a closed space heated by a single focus, Fourier has drawn the following practical results:—"We know," says he, "that living bodies preserve a temperature sensibly fixed, which we may regard as independent of the temperature of the medium in which they live. These bodies are in some degree foci of constant heat, like burning bodies in which the combustion has become uniform. We may, then, from the preceding remarks, predict and regulate with more exactness the rise of temperature in places where a great number of persons are assembled. If we observe there the height of the thermometer under given circumstances, we may determine beforehand what may be its height, if the number of persons assembled in the same place becomes much greater."*

When any point of a body is heated, the heat diffuses itself by

* *Théorie Analytique de la Chaleur.* Paris, 1822, p. 74.

conduction, passing to the nearest particles, and from them to every part of the body. Hence it becomes an interesting problem to determine in what directions, and with what velocities, heat propagates itself in bodies of different kinds, and of different shapes. The French Academy of Sciences had so long ago as 1736, made this problem the subject of a prize. It was required to determine *the nature and propagation of fire*, the word *fire* (*feu*) being then used in place of *caloric* or *heat*. M. Arago has given us a very lively and interesting account of the competition for this prize. Five competitors appeared, and three of them were crowned, to use the academic language. The Academy had declared "that the question *did not give* occasion for the application of geometry." The illustrious Euler, one of the competitors, took this declaration in its literal meaning, and "the reveries," says M. Arago, "with which his memoir abounds, are not relieved by any of those brilliant discoveries in analysis—I may almost say, those sublime inspirations which were so familiar to him. Fortunately Euler joined to his memoir a supplement, really worthy of him. Father *Lozeran de Fiesc*, and the *Count de Crequi* had the distinguished honour of seeing their names inscribed beside that of the distinguished geometer—although it is impossible now to find in their memoirs any species of merit, not even that of politeness, for the courtier stated rudely to the Academy, '*that the question which they had raised, interested only the curiosity of men.*'"

Among the unsuccessful candidates we find the names of *Voltaire*, and *Madame la Marquise du Chatelet*! The memoir of Voltaire was distinguished by the eloquence and precision of its style; and being decidedly anti-Cartesian, was not likely to have found favour, even had its merits been greater, with a scientific body who had plunged headlong among the vortices of Descartes. The work of the Marchioness was an elegant digest of all the properties of heat then known; and contained also several suggestions of experiments—among which we may enumerate that in which Sir W. Herschel determines the heat of different parts of the spectrum, both within and without its luminous termination.

One of the most important steps towards the solution of the academical problem, was made by the celebrated Lambert, who proposed to ascertain the permanent temperature of a prismatic bar of metal exposed to the action of a constant and durable heat. The parts of the bar nearest the fire are first heated, the heat passes onward, till, after a short time, each part acquires the greatest heat which it can attain. Hence it became interesting to determine the ratio between the temperatures of different points of the bar, and their distances from the heating focus. Lambert

succeeded, both by the calculus and experiment, in ascertaining that if the distance from the focus of heat were represented by logarithms, the temperatures themselves would be expressed by their corresponding numbers.* In order, however, to make a complete analysis of the elements of the question, Fourier found it necessary to introduce into the calculus the dimensions of the bar. It had been found, for example, by experiment, that a bar of iron heated at its extremity, could not acquire at the distance of six feet from the focus at that extremity, a temperature of an octogesimal degree; for, in order to produce this effect, it was necessary that the heat of the focus should greatly exceed that of melted iron: But this result depends on the thickness of the bar employed. If it had been greater, the heat would have been propagated to a much greater distance, "that is," says Fourier, "the point of the bar which acquires the fixed temperature of one degree, is as much farther from the focus as the bar has more thickness, other conditions remaining the same."†

The earliest researches of Fourier on the communication of heat, related to its distribution among separate masses. The questions regarding continuous bodies, which, strictly speaking, proved the theory, were resolved several years later, and the theory itself was expounded, for the first time, in a MS. work read to the Institute of France at the end of 1807.‡ Additions were successively made to this Memoir, and sent to the same body, on the diffusion of heat in a prism of infinite length, on its emission into spaces devoid of air, and on its periodic movement on the surface of the globe. In reference to these important communications, the Institute made the *propagation of heat* the subject of the great mathematical prize, which was to be adjudged in 1812, and Fourier's *second* memoir was deposited in the archives of the Institute, on the 28th September 1811. Fourier gained the prize; and his Memoir, which was sent to be printed among the Memoirs of the Institute, forms his *Treatise on Heat*, which has been already mentioned.

The commissaries to whom this Memoir was submitted, were Laplace, Lagrange, and Legendre; but though they gave the highest praise to the author, yet they all concurred in the opinion that they perceived some difficulties in the manner by which Fourier had arrived at his differential equations. This state-

* Amontons made a very remarkable experiment on the establishment of heat in a bar whose extremity was maintained at a constant temperature; and the logarithmic law of Lambert was confirmed experimentally by M. Biot and Count Rumford.

† *Théorie Analytique de la Chaleur*, p. 64.

‡ An extract of this Memoir was published in the *Bull. de la Société Philomatique*, 1806, p. 112.

ment, which was not supported by any argument, gave great annoyance to our author. He considered it unjust, and printed his Memoir without changing a single word of it.

"Nevertheless," says M. Arago, "the doubts expressed by the commissaries of the Academy constantly recurred to his memory. At first they had embittered the triumph of success, and when these impressions are added to his great susceptibility, they explain how he at last viewed with a certain degree of displeasure, the efforts of geometers to bring his theory to perfection. Is not this, gentlemen, a singular aberration in a mind so elevated. Our colleague must have forgotten that it is not the lot of any individual to carry a scientific question to its completion; and that the great works on the system of the world, of the D'Alemberts, the Clairauts, the Eulers, the Lagranges, and the Laplaces, in immortalizing their authors, have continued to add new rays to the imperishable glory of Newton."

The researches of Fourier, independent of their native value, have found an interesting application to one of the most important topics of geological inquiry—the igneous origin of our globe. Descartes, Leibnitz, Mairan, Buffon, and Hutton, had regarded the earth as having been originally in an incandescent state, while others had adopted the idea, that it had a constant temperature, varying only near its surface with the heat emitted by the sun. These views were supported by the fact, that at a certain depth, the thermometer experiences neither a diurnal nor an annual variation. Now, it has been shown by Fourier, that if the earth had constantly received the whole heat of the sun, there will be a certain depth at which the temperature is constant at all seasons of the year; that this solar temperature, as it may be called, varies in different climates, and also in each country; and that it ought to be always the same, provided that we do not descend to great depths, compared with the radius of the globe. But on measuring the temperature of rivers, and of springs issuing from different depths, it is manifest that it increases downwards at the rate of a centesimal degree for every 70 or 100 feet; and that the earth *has a heat of its own*, being, as M. Arago expresses it, *an incrusted sun*, the high temperature of which may be called to our aid when we require to explain geological phenomena.

Under these circumstances, it became a curious problem to determine the influence which the earth's proper heat exercised over animal and vegetable life upon its surface. According to Mairan, Buffon, and Bailly, this internal heat exceeded in France that yielded by the sun, twenty-nine times in summer, and 400 times in winter; but this was a mere conjecture, which the analysis of Fourier has completely disproved. Having discovered that the *excess* of temperature at the earth's surface produced by

the internal heat, over that produced by the sun, had a determinate relation to the increase of temperature at different depths, Fourier found *that this excess did not exceed the thirtieth part of a degree.* It is to the sun, therefore, that we are indebted for the luxuries of our climates; and while this celestial lamp continues to burn, and to maintain its brightness, summer and winter will return with the same alternations of temperature with which they are now distinguished. From the theory of climates Fourier made the still bolder step of determining the temperature of the celestial spaces. The meteorologist had conjectured that a cold of prodigious intensity must reign even in the upper regions of our atmosphere, and still more in the celestial spaces beyond it; but Fourier has determined, in a Memoir, which by some fatality has been lost, that the temperature of the celestial spaces through which the planets wheel their way, is not lower than fifty or sixty degrees *below zero*—a result which he believed was correct to within eight or ten degrees. Among the other valuable problems which Fourier has solved, M. Arago distinguishes a formula for finding the value of the secular cooling of the globe, and determining the number of ages which have elapsed since it began to cool!*

Such is a brief and imperfect sketch of the scientific labours which occupied the leisure hours of Fourier while he was Prefect of the Isère. The return of the Bourbons had not disturbed the quiet of his studies; but events were now at hand which tried the stoutest hearts, and put in peril the most valuable lives. After his escape from Elba, Napoleon arrived at Cannes. When the intelligence of this event reached Grenoble, the principal authorities assembled at the hotel of the Prefect. Each functionary pointed out the difficulties of their position, without finding the means of overcoming them. It was at last agreed, on the suggestion of the Prefect of the Var, to have recourse to proclamations. The general in command, and the Prefect, each gave in his project, and while the assembly were dis-

* In Fourier's theory he conceived the permeability of bodies to heat to be *constant* in every point of the body. M. Duhamel has recently improved the analytical representation of the phenomena by supposing that there are in any mass *three* rectangular directions, which he calls the *principal axes of conductivity*, along which the flow of heat has the same value as if the conductivity were constant, the flow being a *maximum* along each of these axes, and *varying* in all other directions as the cosine of the angle. These axes have an interesting analogy with the three axes of rotation discovered by Euler; and M. Duhamel has shown that they are characterized by the same analytical conditions. But, what is very important, he has rendered the fundamental equation as simple as in the case of *variable permeability*, with this difference only, that the three terms of the second order have not equal co-efficients.—See COMTE'S *Cours de Philosophie Positive*, tom. ii., sec. 30 and 31, containing an interesting account of Fourier's discoveries.

puting about their terms, an officer of gendarmes—an old soldier of the Imperial army—cried out unceremoniously, “Make haste, gentlemen, otherwise all this deliberation will be useless. I speak, believe me, from experience. Napoleon is always very near the couriers which announce him.” Napoleon was indeed at hand. Two companies of sappers and miners who had been sent to cut down a bridge joined their former general. A battalion of infantry did the same, and on the Glacis of the place, in presence of the crowds who thronged the ramparts, the whole of the 5th Regiment of the line assumed the tri-colour cockade, hoisted the eagle, the witness of twenty battles, which they had preserved, and set out with the cry of *vive l'Empereur*. At this conjuncture General Marchand ordered the gates of the city to be shut, and hoped to defend it with the engineers, the artillery, and the detachments of infantry that continued at their post. As all civil authority had now disappeared, Fourier set off for Lyons, where the Princes of the blood were assembled,—a step which, at the second Restoration, was charged against him as a crime, forgetting the fact, that at Grenoble, as in every other place, they could not even oppose the shadow of a resistance.

“It was eight o'clock in the evening,” says M. Arago. “The population and the soldiers covered the ramparts. Napoleon, a few steps in advance of his little body of troops, approaches to the gates—he knocks—(be assured, gentlemen, that it is not a battle I am going to describe)—*he knocks with his muff box!* ‘Who's there,’ cries the officer on guard. ‘It is the Emperor! Open!’ ‘Sire, my duty forbids me.’ ‘Open, I tell you; I have no time to lose.’ ‘But, Sire, even if I were willing to open, I could not; the keys are with General Marchand.’ ‘Go, then, and seek them.’ ‘I am certain that he will refuse them.’ ‘If the general refuses them, *tell him that I will cashier him.*’ These last words petrified the soldiers. For two days hundreds of proclamations had described Bonaparte as a wild beast, whom it was necessary to surround without mercy—they commanded every body to attack him, and yet this man threatened to *cashier* the general. The simple word *cashier* effaced the feeble line of demarcation which separated for an instant the old soldiers and the young recruits; and a word placed the garrison entirely in the interests of the Emperor.”

Fourier carried to the Princes at Lyons the news of the rapid advance of Napoleon, of the revolt of the regiment commanded by Labedoyère, and of the expressions of attachment to their former master which he had witnessed during his journey. The Count d'Artois received the Prefect very ungraciously. He considered Napoleon's arrival at Grenoble as impossible; and “with regard to your other statements,” said he, “as to the revolt of the troops and the hoisting of eagles—I do not suspect your good faith,—but your terror must have deceived you. Return, then, Mr.

Prefect, without delay to Grenoble. You must answer for the city with your head." Fourier had scarcely left Lyons when he was arrested by the hussars, and carried to Bourgoin, Napoleon's head-quarters. The Emperor, stretching over a large map, with the compasses in his hand, said to him on his entrance,—“‘ Oh ! M. le Prefet, you also,—will you declare war upon me ? ’ ‘ Sire, my oaths have made it a duty. ’—‘ A duty, say you ? Do you not see that in Dauphiny nobody is of your opinion ? Don't imagine that your plan of the campaign alarms me much. I regret only to see among my enemies an Egyptian, a man who had eaten with me the bread of the bivouac—an old friend. How could you forget, M. Fourier, that I made you what you are ? ’ ”

“ You will regret with me, gentlemen,” says M. Arago, “ that timidity, which his position so well explains, prevented our Colleague from instantly protesting, and protesting too in the strongest manner, against that connexion which the powerful of the earth are so constantly willing to establish between the perishable goods of which they are the dispensers, and the noble fruits of the intellect. Fourier was Prefect and Baron, by the Emperor; he was one of the glories of France, by his own genius. On the 9th of March, in a moment of irritation, Napoleon, by a decree dated at Grenoble, ordered *Fourier to evacuate the territory of the seventh military division within the space of five days, under pain of being arrested, and treated as an enemy of the nation !* ”

If this threat was not intended to protect Fourier against the Bourbons, the feelings which dictated it did not continue long, for, on the 12th March 1815, Fourier was appointed Prefect of the Rhone, and received the dignity of Count.

Under circumstances of so hazardous a nature, a man like Fourier did not receive with much pleasure these marks of Napoleon's confidence ; but he was not in a position to repel them, and, though thus honoured, he never scrupled to speak the language of truth, even in the trying circumstances in which he was now placed. “ ‘ What think you of my enterprise ? ’ said the Emperor to him, on the day when he left Lyons. ‘ Sire,’ replied Fourier, ‘ I believe that you will fail. If you meet on your route a fanatic, everything is over. ’ ‘ Bah ! ’ replied Napoleon, ‘ the Bourbons have nobody for them—not even a fanatic. You have seen in the journals that they have outlawed me ? I will be more indulgent myself ; I will be content with putting them out of the Tuilleries ! ’ ”

The appointment of Fourier to the prefecture of the Rhone had been anxiously desired by the principal inhabitants of Lyons, who saw the advantage of having such a magistrate in so critical a juncture, and it was therefore impossible to refuse it ; but the high principles of justice and moderation by which his conduct had always been regulated, did not permit him in such times,

and under such a master to continue long in office. He was recalled on the 12th of May, it is said, because he would not lend himself to certain acts of terrorism which Carnot, the minister of the Hundred Days, had ordered him to inflict. That such a step should have been taken by Carnot, his colleague in the Academy, and his brother in geometry, was very improbable; and M. Arago, after diligent inquiry, has declared that in this respect the memory of Carnot is unimpeachable. That it was the act of a higher authority we can scarcely doubt. After Fourier's return to Paris, the Emperor noticed him in the crowd at the Tuilleries. He informed him, in a friendly tone, that Carnot would explain to him why his restoration to the prefecture of the Rhone had become indispensable, and he promised that he himself would attend to his interests, as soon as military affairs would allow him some leisure. The events of May and June, however, deprived Napoleon of the power of serving his friend, and again involved our author and many of his colleagues in circumstances of perplexity and danger.

On the second restoration of the Bourbons, which Providence seems to have permitted in order to give a double proof that they were unfit to reign, Fourier took up his residence in Paris, without employment, and naturally anxious about the future:—

“The man,” says M. Arago, “who for fifteen years administered a great department, and who directed the most expensive works,—who in the affair of the marshes of Burgundy had to stipulate with individuals, communes, and companies for so many millions, did not now possess twenty thousand francs of capital. This honourable poverty,—associations the most interesting,—services the most glorious, could obtain no sympathy from ministers, at that time surrendered to foreign caprice and to political rage. The demand of a pension was rejected with brutality. But let us take courage. France will not have to blush for having left in want one of her most illustrious citizens. The Prefect of Paris—I am mistaken, gentlemen, if a proper name is here out of place—*M. de Chabrol*, learned that his former professor at the Polytechnic School,—that the perpetual secretary of the Institute of Egypt,—that the author of the Analytical Theory of Heat was about to be reduced to the necessity of earning his bread by private teaching. The idea revolted him. He was deaf to the clamours of faction, and Fourier received from him the office of superior Director of the Statistical Board of the Seine, with a salary of 6000 francs. I felt, gentlemen, that I ought not to conceal these details. The sciences may well show themselves grateful towards those who gave them protection and support when there was danger in the act, without being afraid that the burden will ever become too heavy.”

This noble act of liberality will preserve the name of M. Chabrol, when the ministers of the day are forgotten. What

was a personal kindness to Fourier, became a real service to the State. The interesting volumes on Statistics published by the prefecture of the Seine, contain many valuable memoirs by Fourier, which have given a new character and a powerful impulse to this important department of knowledge. But though he was thus usefully and honourably employed, Fourier did not occupy his proper sphere, and the Academy of Sciences seized the earliest opportunity of acquiring the lustre of his name. Early in 1816, he had communicated to them a valuable Memoir *On the Vibration of Elastic Surfaces*; and on the 27th May of the same year, an opportunity occurred of electing him a Free Academician. Louis XVIII., however, misled by false and hostile statements regarding his political conduct, refused to sanction the election; and though the influence, the solicitations, and the entreaties of persons from Dauphiny, whom circumstances detained at Paris, might probably have disarmed authority—yet a courtier exclaimed, that they were about to give an amnesty to the *Civil Labeledoyère*! This word decided the fate of Fourier; and, as M. Arago observes, “the ministers of Louis XVIII. decreed, that one of the most learned men in France should not belong to the Academy, and that a citizen, the friend of every distinguished person that the capital contained, should be publicly branded with reprobation!”

This system of persecution, however, did not last long. A vacancy having taken place in the Section of Physics, the Academy unanimously elected Fourier. The King, after a careful examination of the charges against him, confirmed the appointment; and when the Academy again elected him in 1822 to fill the important office of Perpetual Secretary to the Institute, vacant by the death of Delambre, the royal approbation was readily given. The Government even went so far as to offer him the direction of the Academy of Fine Arts; but he had the good taste to refuse it. On the death of Lemontey, in 1827, the French Academy enrolled him in their body, where the sciences were already represented by Laplace and Cuvier. In the same year he succeeded Laplace as President of the Council for the improvement of the Polytechnic School; and, after the fall of M. Villele's ministry, he was named a member of the commission established by the Minister of the Interior for granting encouragement to learning. The Royal Societies of London and Edinburgh, and other Academies, hastened to honour their foreign lists with his name; and Fourier thus found himself, after so much disastrous change, in the very position for which he was destined—the conjoint Perpetual Secretary of the Institute along with the illustrious Cuvier, and, as the *Eloges* of Delambre, Breguet,

Charles, and Herschel, prove, not inferior to the great naturalist in that high eloquence and literary taste, which are indispensable in the biographer of illustrious men.

To his more solid accomplishments, Fourier added powers of conversation of a very *fascinating* kind. His great general knowledge, the eventful character of his life, and the various persecutions to which he had been subject, afforded topics interesting and inexhaustible. M. Arago has recorded an example of the fascination which he exercised over his company, in so graphic and striking a manner, that we cannot withhold it from our readers.

"We were seated at the same table," says M. Arago. "The guest whom I separated from him was an old officer. Our Colleague learned this; and the question, 'Have you been in Egypt?' served to bring them into conversation. The answer was in the affirmative. Fourier hastened to add, 'With regard to myself, I remained in that magnificent country till its evacuation. Though a stranger to the profession of arms, I fought in the midst of our soldiers, against the insurgents of *Cairo*; I had the honour to hear the cannon of *Helio-polis*.'" From this there was but one step to give an account of the battle. This step was soon taken, and, behold four square battalions forming themselves in the plain of *Qoubbeh*, and manœuvring at the bidding of the illustrious geometer with the most admirable precision. My neighbour, with his ear on the watch—his eyes immovable—his neck extended—listened to the recital with the most intense interest. Not a syllable escaped him; and one might have sworn, that this was the first time that he had heard of these memorable events. After having remarked the effect which he had produced, Fourier returned, with still more detail, to the principal battle of these great days—to the taking of the fortified village of *Mattaryeh*—to the passage of the two feeble columns of French grenadiers across the ditches heaped with the dead and the wounded of the Ottoman army. 'Ancient and modern generals!' exclaimed our Colleague, 'have sometimes spoken of similar acts of prowess; but it was in the hyperbolic language of the Bulletin: Here the fact is substantially true: it is as true as geometry. I feel, too,' added he, 'that to make you believe it, would require all my testimony!' 'Do not disturb yourself on this point,' replied the officer, who at this moment seemed as if he had started from a long dream. 'I can, at least, guarantee the correctness of your recital. It was I who, at the head of the grenadiers of the 13th and the 85th demi-brigade, crossed the entrenchments of *Mattaryeh*, and passed over the bodies of the *Janissaries*.' My neighbour was General Tarayre; and it is easier to conceive than to express the effect of the few words which he uttered. Fourier became confused in his apologies, while I reflected on that fascination and power of language which, for nearly half an hour, had so far entranced a celebrated general, as to make him forget the

part which he had played in the combat of the giants, which was related to him."

Fourier was naturally endowed with a vigorous constitution. When he was in Egypt and at Grenoble he experienced some serious attacks of aneurism in the heart; but in the interval his general health was good, if we except some slight rheumatic affections which induced him, even in the dog-days, to wear a dress which would have suited an arctic climate. "I am supposed," he used to say, smiling, "to be corpulent; but I assure you there is much to be deducted from this opinion. Were I, like an Egyptian mummy, to be submitted, which may God avert, to the operation of unswathing, there would be found for a residue but a very delicate frame." After he had settled in Paris, he was afflicted with frequent suffocations, which sufficiently indicated their cause, and which the skill of his celebrated friend and physician, Baron Larrey, was unable to remove. A fall which he met with on the 4th May 1830, while descending a stair, accelerated the progress of this incurable disease. On the 16th May 1830, about four o'clock in the evening, he experienced a severe attack, which was more serious than he himself believed; for after he had thrown himself upon a bed, he begged his young friend M. Petit, who acted as his physician, not to go far away, as he wished to have some conversation with him. He had no sooner uttered these words, than he called out, "Quick, quick, some vinegar; I am fainting." In an instant this great man breathed his last, in the sixty-second year of his age.

In the events of the life of Fourier, our readers will have already recognized his splendid talents—his profound acquirements as a mathematician and a natural philosopher—his devotion to the interests of knowledge and humanity—his patriotism when deeds alone could display it, and his uprightness and love of justice as an active functionary of the State;—but it is only from the testimony of those who were honoured with his friendship and enjoyed his society, that we can form a just and full estimate of so remarkable a man. M. Arago has, in the following eloquent passage, depicted the character of his Colleague:—

"This cruel event is too recent, gentlemen, to render it necessary that I should speak at present of the profound grief which was felt by the Institute at the loss of one of its most remarkable members;—or of the obsequies where so many men of different kinds of opinions united in the common sentiment of veneration and regret around the lifeless remains of Fourier;—or of the Polytechnic School joining the procession in a body to do homage to one of its oldest and most celebrated professors;—or of the words which over his tomb painted so eloquently the profound mathematician—the writer full of taste—the honest admi-

nistrator—the good citizen—and the devoted friend. We shall mention only that Fourier belonged to all the principal learned societies in the world, and that they participated with the most affecting unanimity in the grief of the Academy, in the grief indeed of all France—a striking proof that in the present day the *republic of letters* is not an empty name! What, then, is wanting to the memory of our Colleague? A successor more skilful than I have been, to grasp and place in relief the different phases of a life so varied, so laborious, and so gloriously associated with the grand events of the most remarkable epoch of our history. The scientific discoveries, fortunately, of the illustrious Secretary have nothing to dread from the insufficiency of his biographer. My purpose will be completely gained, if, notwithstanding the imperfection of my sketches, each of you have understood that the progress of general and terrestrial physics and of geology will only more and more multiply the fertile applications of the *Analytical Theory of Heat*, and that this work will carry down the name of Fourier to the remotest posterity.”

The interesting Memoir which we have thus analyzed, and the deeds of glory and of shame which we have recorded, present to us, as individuals and as a people, topics of grave consideration. If in the life of one man, and that man a recluse philosopher, the elements of revolution have worked with such fearful agencies, how wild must have been their play when they leavened the huge mass of a sensitive, an intellectual, and a powerful nation! The history of France, of her intestine broils, and her military struggles does not reveal to us in their massive aggregate the horrors of the Revolution. In the physical volcano we see the furnace of its crater, and the blazing missiles which it ejects; we hear its bellowings, and we feel its earthquakes; but we know little of the Fire-King that directs its flames—of its burning chasms—of its red-hot caverns, or of its boiling cauldrons, where millions of living things perish, and are tossed into the air, as if the powers of inorganic nature were displaying their giant supremacy over the instinct and intelligence of organic life.—So is it in the volcanic outburst of earthly passion: Kindled by injustice—inflamed by the insolence of office—and cramped and controlled by an iron despotism, it nurses in secret its wild revenge, till, lashed into fury, it pours forth against the oppressor its lava flood of retribution and of crime! Thus intrenched in power, guilt becomes the avenger of guilt, and in the “game of mutual homicide” the patriot and the sage fall—the citizen perishes on his hearth, and the peasant in his field. But even in this general picture how little do we see of local atrocities, of domestic feuds, or of individual misery. The page of history neither paints nor records the parent’s anguish, or the child’s alarm—the summons to the conscript—the panic of the day and the panic of the night—the bayonet glittering in the foreground, and the scaffold looming in

the distance. It is only by the events of one man's life, where unity is the co-efficient, that we can integrate, in fearful summation, the infinitesimals of suffering and of crime.

But while the life of Fourier enables us to estimate the horrors of Revolution, and to dread their recurrence, it exhibits to us an array of distinguished men who have been trained in its school of adversity, and of purified and almost perfected institutions which have sprung up under their intellectual control. Nowhere in the Government and legislature is the influence of mind more distinctly seen than in France—nowhere are its claims to rank and to office more distinctly recognized—nowhere are the appointments of science more impartially and justly made—nowhere are the educational and literary institutions more liberally supported; and nowhere does the State interfere less injuriously with the rights of conscience, the principles of toleration, and the demands of knowledge. The undue privileges of rank and wealth have disappeared, and with them the oppression and the discontent which they engendered. Mind meets mind in a noble rivalry, in which the fame of the individual becomes an unit in the nation's glory; and that intellectual force which when itself down, and acting downwards, disorganizes and crushes all that is beneath it, now raised to its native sphere, becomes the ornament of the throne, and the bulwark of the State.

Need we ask if Great Britain possesses Institutions like these. —Where have we a NATIONAL SYSTEM OF EDUCATION devised by legislative wisdom, and sustained by legislative liberality? England cannot boast even of its skeleton, or of its shadow. In one place we see the schools of the Church, in another, the schools of Dissenters, and throughout the kingdom numerous establishments founded by the piety and munificence of our forefathers. In Ireland we have a national system of education which the nation does not recognize—denounced by the Established Church, and but partially accepted by the Roman Catholics. In Scotland we have a system of parochial schools, paid by the heritors, and controlled by the Establishment; yet ejecting teachers, and rejecting candidates, who refuse to conform to its discipline and worship;—and everywhere in the three kingdoms we have rival seminaries—teaching different truths—inculcating different principles—and educating, in political and religious antagonism, the generous youth who are to be the future instructors, and lawgivers, and defenders of the empire.—Where are our NATIONAL UNIVERSITIES—regulated by Parliamentary statute—strong in the unity of their doctrine and their discipline—conferring their literary honours upon the men that merit them—inviting to their chairs of office the genius and learning of the age, and seeking no other test but that of fearing

God, and honouring the King? Alas! where are they to be found? Not surely in the two noble institutions which stand in hoary antiquity and unreformed grandeur on the Cam and the Isis—mighty in intellectual power and glorious memories—yet rejoicing in ancient and exclusive privilege, and politely shutting their portals against every class but their own:—Not in the Colleges of the metropolis, chartered by the State, yet depending on the casual bounty of private munificence:—Not in the University of Dublin, admitting to its offices and its rich Fellowships but a small portion of the nation: Certainly not in the Universities of Scotland—overborne in the metropolis by the incubus of municipal control;—degraded in the provinces by internal abuse, and ecclesiastical domination; and impoverished everywhere by self-plunder, or national parsimony.—We do recognize them, however, if not in the maturity of their fruit, at least in the freshness of their germ, in the IRISH COLLEGES, those light-towers of knowledge which a wise Government has erected in a dark land; and which, we trust, will be the harbingers of a *Grand Intellectual Reform*, conferring the noblest of all political rights—the franchise of a liberal and religious education upon every subject of the British empire.

But while it is necessary to educate our youth in national institutions, under men of undoubted genius and learning, and with a high yet liberal tone of religious feeling, there is yet another duty which belongs to the State—a duty which it owes to the world as well as to itself. The arts and the sciences demand from every Government a more than paternal care. Statute cannot create them by its enactments: nor can royal patronage allure them by its favours. They must be the slow growth of institutions which the State supports and the Sovereign honours. When creative genius has completed its apprenticeship in the schools, it must develop its energies in the closet for still higher functions, or it must exhaust them in the ordinary routine of professional labour. Hence it becomes the duty of the State to endow National Institutions like the Royal Institute of France and the Imperial Academies of Science at St. Petersburg and Berlin, where men of the highest attainments in science, literature, and the arts, shall be incorporated, and unite their talents in advancing knowledge, and in aiding government in every enterprise where theoretical or practical skill is required. Such has been the policy of almost every nation in Europe but our own. The Royal Societies of London, Edinburgh, and Dublin, have been, to a certain degree, substitutes for the endowed institutions of the Continent; while the Geological, the Astronomical, the Linnæan, and other Societies, supply the defects of the parent establishment. But noble as these institutions are—accomplished

as are the men that guide them, and valuable as are the transactions which they publish, there is yet a want of unity in their efforts, and, to a certain extent, an antagonism in their pursuits. When the noble patrons of science, and its opulent amateurs, stand in the same rank with its highest functionaries and its most active cultivators, their joint action must be feeble, however common and well-directed be its aim. A heterogeneous body is as defective in moral as it is in physical power; and there is a reaction among its elements, which tends to corruption or decay. Cabals will arise—incapable office-bearers and unqualified members will be elected—a system of favouritism will spring up—the rewards of invention and discovery will be improperly bestowed—and men of high principle will retire, in disgust, from an institution thus mismanaged and dishonoured.

If private associations, then, thus characterized, have hitherto failed to accomplish what national institutions everywhere secure, how unsuitable must they be in the present day, when science, in its theoretical and practical embrace, has grasped all the great interests of the State, and is the only safe guide to their future development, and their final safety. With steam-ships on every sea—with steam-power in every farm and factory—with a system of agriculture leaning upon science as its mainstay—with a network of railways demanding for their perfection the highest efforts of mechanical skill—the time has doubtless arrived when Government should summon to its aid, and unite in its service all the theoretical and practical wisdom of the country. An institution thus composed would not merely combine the living talent which is in active exercise around us: it would concentrate what is scattered, and rouse what is dormant; and under its fostering wing, as the Home and the Temple of Science, we might expect, without the excitement of a revolution, to nurse a race of sages, like the Baillys, the Carnots, the Cuviers, and the Fouriers of another land—men who united the characters of the statesman, the hero, and the philosopher, and who, in the hour of danger, were the best defenders of their country. In the erection of a Temple like this, our present patrons and amateurs of science would either occupy an honorary place in the pediment which adorns it, or crown as ornamental capitals the Corinthian pillars upon which it rests.

ART. VI.—*The Dispatches and Letters of Vice-Admiral Lord Viscount Nelson; with Notes* by SIR NICHOLAS HARRIS NICOLAS, G.C.M.G. Vols. I.—IV. 8vo. London, 1844–45.

WE do not know any edition of a work of this sort better executed than this is on the whole; yet we know no other such publication, the editor of which is more liable to animadversion. So long as Sir N. H. Nicolas has limited himself to perform his office of *editor*, he has been eminently successful, and his industry deserves praise; but when, led away by admiration for his hero, he undertakes to defend deeds which have met with the reprobation of men of all parties and countries, he inflicts a severe blow, not only on the memory of his hero, but on his own judgment. We say, “on his own judgment,” feeling satisfied, that, had not that judgment been warped by a bias for a man of so high a reputation as Nelson, Sir Harris would have been the last man to take on himself the awful responsibility of apologizing for conduct which has stamped an indelible stigma on Nelson’s name—conduct which made his most distinguished biographer say, that “to palliate it would be in vain; to justify it would be wicked: there is no alternative for one who will not make himself a participator in guilt, but to record the disgraceful story with sorrow and with shame.”* Thus it is that the severity of history, in the case of so renowned a man as Nelson, is almost disarmed, and his crimes extenuated as foibles inseparable from human nature, and almost forgiven, if not forgotten. But when a man, like the editor of the work before us, is so far dazzled by admiration as to defend atrocities unequalled in Europe in our times, it behoves impartial men to expose the futility of the defence, and to hold up to the execration of all honest men the criminal. It is only by the fear of posterity and of infamy, that men placed by circumstances in a position which enables them to defy with impunity the laws of humanity, of nations, and of society, can be deterred from breaking them; it is an encouragement to future atrocities, to uphold those of former times. The more illustrious the criminal, and the more respectable in point of talents—and still more in point of character—the advocate, the more is it requisite to expose the misdeeds of the one and the sophisms of the other, and prevent either of them from lending the weight of their names to the defence of what ought

* SOUTHBY’S *Life of Nelson*, chap. vi.

to be abhorred. National honour, and consequently national interest, demand it equally. Should enormities like those of which Admiral Nelson was guilty, pass unreprieved, then, indeed, the nation might be said "to make herself a participator in his guilt." Fortunately for the honour of England, this cannot be said of her. Such eminent men as Southey, Wrangham, Brougham, Fox, Alison, Foote, James, Brenton, and a host of others, have been unanimous in casting the opprobrium of his deeds on the responsibility of the perpetrator. Even his biographers, Clarke and M'Arthur, men not particularly scrupulous in defending their hero, were nearly giving him up. Of all the distinguished companions-in-arms and friends of Nelson, some of whom are still alive, not one has had the courage to stand up for him. When Mr. Fox, in his place in the House of Commons, reprovved the conduct of the British admiral, not a minister raised his voice in his defence; and when Nelson complained so bitterly of the attack thus made on him,* though his complaints were communicated to a Cabinet Minister,† neither the Minister nor any of Nelson's friends ventured to allude to the subject in Parliament,‡ or send what he supposed his defence to the newspapers. Sir Nicholas H. Nicolas is the first champion of name who undertakes to defend a cause which no one hitherto thought defensible; and flatters himself with "the exposure of ignorance, prejudice, and falsehoods that more or less pervade every statement on the subject."§ These are hard words. We shall show that they are utterly uncalled for; we shall prove beyond question that no one has committed more mistakes, or has shown himself more prejudiced, than the learned editor himself. Far from us to think him liable to the charge of ignorance or falsehood! As he himself publishes the documents that will serve to convict him, it is clear that he cannot be liable to either the one or the other of those two accusations.

Before entering on that, the most important part of our subject, we shall offer a few observations on the historical value of the Letters themselves, and on the edition now before us. There is no question that these Dispatches show great enthusiasm,

* *Dispatches*, vol. iv. p. 232. *Clarke*, ii. 266.

† *Clarke*, in a letter to Foote, said that Nelson's "reasons for acting as he did were carried by Davison to Lord Grenville."—*Vindication*, p. 46.

‡ Nelson himself took his seat in the House of Lords on the 20th of November, 1800, but he forgot to notice the attack on his character from such a man as Fox, in such a place as the House of Commons, though he felt when far off that he was "called upon to explain his conduct," and wished to be set right by others in public opinion.

§ Preface to vol. 3, p. viii.

patriotism, loyalty, courage, and determination in their writer ; as a man, up to a certain period he seems to have been a good son and a good husband. To his friends and companions-in-arms Nelson was warmly attached, so far as his rather suspicious temper and uncommon vanity allowed him ; his foible for Lady Hamilton caused him to be guilty of very unfair conduct towards those whom she hated the more for having wronged them most cruelly. To the influence which that woman had over him must be attributed the sanguinary and ungenerous sentiments that he uttered towards the enemies of his country ; at all events, in early life he was neither so virulent against them nor so certain that the cause for which he fought had justice on its side.

The enthusiasm, which we have observed to be prominent in Nelson's character, led him sometimes to express himself in such terms as are either ridiculous or utterly indefensible. Struck by the horrors which attended the evacuation of Toulon, he says,—

"Then," on the troops and royalists embarking, "began a scene of horror, which may be conceived, not described. The mob rose ; death called forth all its myrmidons, which destroyed the miserable inhabitants in the shape of swords, pistols, fire, and water. Thousands are said to be lost. In this dreadful scene, and to complete misery already at the highest, Lord Hood was obliged to order the French fleet to be set on fire."—Vol. i., p. 342.

This jumble is the effect of an excited imagination ; the following is the consequence of inordinate vanity.* He writes to his wife :—

"I have just received the Emperor of Russia's picture, in a box magnificently set with diamonds ; it has done him honour, and me a pleasure to have my conduct approved."—Vol. iii., p. 381.

On another occasion, giving vent to his dissatisfaction, as he often does, at his services not being acknowledged as, in his opinion, they deserved, and to his fear that they will go unrewarded, he says,—

"My country, I trust, will not allow me any longer to linger in

* Those who have known Nelson, agree in saying that he was very vain,—a weakness not seldom allied to great courage, though universally supposed incompatible with it. General Wolfe was very vain. Sir Harris Nicolas will not believe that Nelson once exclaimed, "Westminster Abbey or victory," as it is "a gasconade very inconsistent with his character," (vol. ii., p. 342.) Yet it is recorded that the same idea struck him before the battle of the Nile.—CLARKE and M'ARTHUR, ii. 10. 8vo edition.

want of that pecuniary assistance which I have been fighting the whole war to preserve to her."—Vol. ii., p. 436.

But what follows is a more serious *escapade*. The Bey of Tripoli was supposed to have turned favourable to the French, then in Egypt. Nelson writes to him the most violent letter, charging him with having

"renounced the defence of the true Mussulman faith, and joined in a new alliance with the French infidels, who are endeavouring to overthrow the Ottoman Empire, and the worship of the true only God and his Holy Prophet. . . . It will be my duty to join with the Admiral of the Ottoman fleet in chastising those enemies of the true faith and of the Grand Signior," &c.

And to the Consul at Tripoli, he says :—

"If his Highness renounces his evil counsellors, and retracts in writing and in due form any treaty he may unwittingly have entered into against the Grand Signior and the true faith of Mahomet, it will give me sensible pleasure. . . . You will urge this point with energy and delicacy, so as to make it appear that it is the cause of the Grand Signior and the Mahometan religion that we are called upon to defend. . . . You must take care that the Bey must always suppose (what is true) that we are supporting the Grand Signior and the Faith against atheists, assassins, and robbers."—Vol. iii., pp. 300 and 301.

It would appear that Bonaparte and Nelson agreed in one single point during all their lives, viz.—the holiness and truth of Mahomedanism and of Mahomed, and the claim that both, the French General and the English Admiral, had on the gratitude of Moslems for supporting that *true faith* and that *holy prophet*.

As it was after his intimacy with Lady Hamilton that he penned these letters, we charitably suppose he would not have written them before, his whole conduct being certainly altered after that fatal acquaintance. Nelson undoubtedly always hated the French, but as Frenchmen not as Republicans;* but it was most ungenerous of him to stigmatize the whole army in Egypt—that army that numbered amongst its officers Desaix, Kleber, Soult, Berthier, and a host of others—as a band of assassins, especially when he knew that his officers and seamen, when prisoners in the hands of the French, were well treated, *because belonging to his ship*. What a contrast!† But the

* "I hate a Frenchman. They are equally objects of my detestation, whether royalists or republicans—in some points, I believe, the latter are the best."—Vol. ii. p. 117. This the Rev. J. S. Clarke called "most commendable hatred."

† "My officers and people who are prisoners in France are exceedingly well treated, particularly so by the naval officers; and, as they say, because they belong to the Agamemnon, whose character is well known throughout the Republic."—ii.

ferocity which he displays against them at a later period, is utterly shocking :—

“ At Augusta,” he writes on the 28th of January 1799, “ 140 French arrived from Alexandria. Eighty-two were killed by the people on the 20th, the rest were saved by a Neapolitan frigate. What a fool.”—Vol. iii., p. 242.

Now the victims were not there as enemies, and it is painful to compare Nelson’s brutal joy with the terms in which an undoubted partizan of legitimate government and an adversary to the French—yet a Christian and a gentleman—speaks of the same event :—

“ Two events only caused pain to honest people in Sicily. The first was that a Genoese ship, with sixty-six blind or wounded French soldiers, returning from Egypt, having touched at Augusta in January,* the populace, who thought the ship might carry a valuable cargo, boarded it, and, in plundering it, murdered forty-five of those invalids. The others were with difficulty saved by a Neapolitan frigate which chanced to be there. The other event,” &c.†

Having heard that the plague had attacked the French army, he writes—

“ Thank God, the plague has got into both the French army and into their shipping. God send it may finish these miscreants.”—iii., 277.

And again, at a later period—“ The plague, thank God, has got among them,”—(iv. 254)—thus rejoicing at the fulfilment of the mean wishes he had expressed long before, speaking of the army which had landed in Egypt :—

“ I have little doubt but that army will be destroyed by plague, pestilence and famine, and battle and murder, which, that it may soon be, God grant.”—Vol. iii., p. 108.

Had Lord Nelson been carried away by a sense of the justice of the cause in which he was embarked, and by an honest conviction that the extermination of the French was as just as it was necessary, one might find some palliation for the applause which

124. The French navy are afterwards called “ miscreants,”—(vol. iii. p. 459)—and such other choice names elsewhere. The garrison of Malta are “ scoundrels.”—iv. 197.

* They were driven into Augusta by a storm. Bonaparte, who is called a murderer, an arch-thief, and such other names by Nelson, set at liberty the emigrants who were driven into a French port by similar misfortune. No one has ever called him a fool for that.

† The event here going to be related has nothing to do with our subject. *CORRÈ, Annali d'Italia*, tom. iii. p. 93. The work was published at Rome in 1829.

he bestows on the horrible means of destruction to which he hopes that they are exposed. But he was not misled by any such bias in favour of that cause. He was always of opinion that the best mode of putting an end to the Republic and to the war, was not to interfere. He writes in 1794—

“I am still of opinion it (the war) cannot last much longer; not by the French having an absolute monarchy again, but by one leaving them alone, perhaps the wisest method we can follow.—i., 355.

And in 1795—

“Pray God send us peace. We have established the French Republic, which, but for us, I verily believe, would never have been settled by such a volatile changeable people.”—ii., 117.

He relates in 1796, that the Dey of Algiers would not make peace with the Genoese and Neapolitans, “for,” said his Highness’s envoy, “if we make peace with every one, what is the Dey to do with his ships?” On which Nelson exclaims, “What a reason for carrying on a naval war! But has our minister a better one for the present?”—(ii. 236.) Nor was he slow in perceiving the absurdity of subsidies, for, he said, “poor England will be drained of her riches to maintain her allies, who will not fight for themselves.”—(i. 492.) And again, “I very much believe that England, who commenced the war with all Europe for her allies, will finish it by having nearly all Europe for her enemies.”—(ii. 171.) This prediction was *never* fulfilled, whatever the learned editor may think to the contrary;* but no doubt the time came when nearly all Europe was against England—and England triumphed; the war did not, however, finish at that period.

It was on the plea of maintaining one of those allies “who would not fight for himself,” that Nelson rendered himself guilty of crimes unparalleled for their baseness, for their cruelty, and for their consequences. It is to have the sentence passed on him by the unanimous consent of the civilized world, reversed, that the editor of his Letters has entered into an elaborate examination of all the facts of the case, and all the documents bearing on it, which he, with some justice, prides himself in having collected; we undertake to show, from those very documents and very little else, that the conduct of Nelson was even worse than has been hitherto supposed, and that in attempting to defend him, the

* The editor makes the following note :—“This remarkable prediction was not, however, completely fulfilled, until after Nelson’s death.” The war against Napoleon and France did not end after Nelson’s death till 1814, when all Europe was with England.

learned editor has put it out of doubt, that Nelson was still more criminal than has been previously believed.

It is only necessary to premise that, on his return from the Battle of the Nile, Nelson gave way to the passion which was kindled before for Lady Hamilton. In December 1798, it had reached the ears of Lady Nelson and of his friends in England, as we find from a letter of Davison—(vol. iii. p. 138)—who expressed his regret that Nelson should continue in the Mediterranean. But it was too late. The history of Lady Hamilton is well known. Remarkably handsome, attractive, and artful, from the lowest station in which she was born, and of which she preserved, to a great degree, the manners and language to her last days, she had been taken from walking the streets of London, and had passed through, no one knows how many hands, to those of Sir W. Hamilton, English minister at Naples, who made her his wife. But her previous life was in the way of her being received either at Court, or by the Neapolitan aristocracy, until the power she had acquired over Lord Nelson, even before the battle of the Nile, was taken advantage of by the Queen of Naples for her political views, and Lady Hamilton became not only a favourite, but an indecently familiar companion, and, if the word were not profaned, when speaking of such wretches, the friend of the Queen. Soon after the battle of the Nile, the king of Naples, unquestionably urged to it by Nelson, had the imprudence to attack the French in the Roman States. His Majesty was soon driven out of Rome, of which he had possessed himself, and in three weeks he bravely ran away from Naples to Sicily, on board the Vanguard, commanded by Nelson, leaving his continental dominions to make the best terms they could with the French, who soon became masters of the kingdom, and organized it as a Republic. The whole of those dominions were lost to the king; there was not a soldier nor a banner of his left; and a king, who betrays his people and runs away from them, when they press him to stay at his post, as the Neapolitans did,* absolves them, most undoubtedly, from an allegiance which is only the counterpart of protection. Francesco Caracciolo commanded a Neapolitan frigate (the *Archimedes*), which escorted the king, and went with him to Sicily, whence his sovereign allowed him to return to Naples, the republican government having

* The king ran away on the 20th of December 1798. It was only on the 22d of January that the French entered Naples. Sir W. Hoste, who witnessed the triumphal return of the king of Naples to his continental dominions, wrote to his mother in June 1802 :—"It must appear truly ridiculous to every one to see the honours of a triumph given to a man who, in the hour of danger, had basely deserted them."—*Memoirs and Letters*, i. 180.

threatened to confiscate his property. "But neither the king nor he himself ought to have imagined that, in such times, a man of such reputation would be permitted to remain inactive."* But no more of this at present.

The populace in the mountains excited by the priesthood, and led by them, and by villains who had escaped from the gallows for the most horrid crimes,† had taken up arms for the king. Among those who had followed the king to Palermo, was Fabrizio Ruffo, a cardinal, of the noble and most loyal house of Castelvicala. He landed thence at Bagnara, one of the feudal possessions of his family, where he put himself at the head of all the refuse of society who chose to follow him—for it was only the lower classes—those who had nothing to lose—who were on the side of the Cardinal,‡ who, in the name of religion and loyalty, led them to plunder and murder with the cross and the royal cockade on their hats, and usurping the name of "Army of the Faith," and of "Christian Army," though one of its most distinguished leaders was known by the *soubriquet* of FRA DIAVOLO.§ It was this *army* that, by the assistance of the English, succeeded in conquering the kingdom

* SOUTHBY'S *Life of Nelson*, chap. 6.

† The cruelties, murders, and wholesale slaughters committed by the monsters here alluded to, are so very revolting, that our readers would be disgusted were we to attempt to record any. Nothing in the history of the most barbarous nations can be found surpassing, and seldom anything equalling, the conduct of the allies of Lord Nelson. Their assassinations, not discouraged by the Admiral and his friends, pass uncondemned and smiled at by the apologists of Lord Nelson. The following is a case of simple murder, one of the mildest by far of those days, which will give an idea of the times and of the men. Nelson writes to Lord St. Vincent as follows:—"Our friend Troubridge had a present made him the other day of the head of a Jacobin, and makes an apology to me, the weather being too hot, for not sending it." The head was sent by the assassin to Troubridge, with what is simply called "a curious letter," dated Salerno, 26th April 1799, of the following tenor:—"Sir, As a faithful subject of my king Ferdinand IV., whom God preserve, I have the glory of presenting to your Excellency the head of D. Charles Granozio di Giffoni, who was employed in the administration directed by the infamous commissary Ferdinand Ruggi. The said Granozio was killed by me as he was running away. I beg your Excellency would accept the said head." (NELSON'S *Dispatches*, vol. iii. 348.) Now his Excellency did accept of the head. He laughed at the deed, and wrote on the letter, "A jolly fellow," and talked jocularly of sending it on to his superior and friend for his amusement!

‡ "At Naples all the lower orders are loyal and attached to their sovereigns, and, indeed, so they are in the provinces; for this war presents the very extraordinary circumstance of the rich taking the road for the destruction of property, and the poor protecting it."—Vol. iii. p. 324.

§ "Ruffo's army consisted of a motley tribe of Calabrese royalists, galley slaves, and criminals from the gaols, and banditti, from the south to the north of the kingdom."—CLARKE & M'ARTHUR, ii. 256.

"Captain Troubridge has given a portion of that spirit he so eminently possesses to all who communicate with him. The Great Devil [he meant *Fra Diavolo*] who commands a portion of the Christian army, has been on board the *Culloden*," &c.—*Dispatches of Lord Nelson*, iii. 340. Observe here an assassin receiving his inspi-

of Naples for its king, after the French had been obliged to withdraw from it.

The government which had been formed in the king's absence, had retired, towards the end of the republic, into the Castelnovo and Castel dell' Ovo, the French under the command of a scoundrel of the name of Mejean, having possession of Castel Sant' Elmo, the only one, in fact, which can be well defended, particularly when the other two are in friendly hands. We now come to the most important part of these transactions, into which it is necessary to enter minutely, to understand all the otherwise incredible infamy of Nelson's conduct.

We are informed* that on the 10th of June, 1799, Ferdinand, king of Naples, hearing that the populace were in his favour in the capital, determined to send his eldest son and a body of troops of the line to assist his partizans in recovering it.

"This measure, however," says a letter of the king to Nelson, "without your valuable assistance and direction, cannot produce the necessary result. I have recourse, therefore, to you, my Lord, to obtain both the one and the other, so that (if God will bless your efforts and ours,) this kingdom being speedily delivered from the scourge it has experienced, it may henceforward be in a condition to perform the engagements contracted, which duty and reason prescribe. I send, therefore, a copy of the instructions I give to the superior Generals, and which I forward to those on the Continent. At the head of these I have placed my son, whom I trust to your friendly assistance, so that his first steps in his present critical career, which he will have to run, may be guided by your wise advice, requesting you not only to help him with your powerful aid, but that you will always† act principally, as your forces are the true means and support on which I rest my future hopes, as they have hitherto been my safety. . . . The powerful and distinguished fleet with which you will support the expedition, leads me to flatter myself with that happy result which will especially depend upon it. . . . When therefore . . . you shall judge necessary to employ actual and powerful force," &c. (iii. 492.)

rations from an English captain in the Navy—an assassin nicknamed the Devil, commanding a "Christian army,"—and all this in joke! This villain [Fra Diavolo] the editor of Nelson's Dispatches, calls "a Calabrese, who distinguished himself in the Royal cause," (iii. 340.)

* We quote the letter, but we believe it apocryphal; we may allow, because it is of no consequence, that such a letter may have at the time been written, but we say that the king of Naples was incapable of writing it, both *mentally* and *materially*: that is, he neither could express himself in such terms, nor could he write so long a letter with his own hand. He may have signed it. But we repeat it again, supposing it is what the editor believes it to be—a holograph—it is of no consequence; it is at the utmost a *private* letter, not a solemn kingly act and document. See it at length, iii. 491.

† There is no *always* in the original Italian.

Now, although this letter is written as the editor says, "shortly before he (Nelson) sailed for Naples," (p. 491,) it is not fair—and the mistake is highly reprehensible—to connect the letter with the entrance into the Bay of Naples, on the 24th of June. After the Crown-Prince had embarked on the 13th of June, the fleet was obliged to change its destination, and instead of going to Naples, it went after the French fleet, so that the Prince was landed in Sicily on the 14th,* and the expedition to Naples was given up. The letter of the king was not an official document—had it been so, it was only saying what was well-known, that the king neither had had, nor had, nor could have, any hope but in the English fleet; without it he neither could ferry his troops across from Sicily, nor expect to succeed; but it never can be twisted to mean that the command-in-chief of the expedition was conferred on Nelson by it. Far from it, the king sends him a copy of the instructions given to the superior generals: He does not give any to Nelson; nor does he direct the Neapolitan generals to put themselves under the Admiral's orders. It is absurd to argue such points: but as the editor draws most unwarrantable inferences from utterly groundless assumptions, we beg to notice them. Whatever, moreover, the powers of Nelson were to be, on that particular emergency, there was an end of them by the expedition being given up, the Prince landing, and the fleet going on another service.

This was in consequence of a letter of the 6th of June, which Nelson received on the 13th of the same month from Lord Keith, informing him that the French fleet, (consisting of at least twenty-five sail of the line,†) might go towards Nelson with a wind favourable to the enemy, whilst he, Keith, could not follow them. Nelson had no choice but to land the Prince, the troops, the ammunition, &c., and go to meet the French off Marittimo, though with a very inferior force, "not fit to face the enemy," as he says; and then adds, "although as I am, I cannot think myself justified in exposing the world (I may almost say) to be plundered by those miscreants." (iii. 380.) He left during this absence Captain Foote of the *Sea-horse*, to continue at the head of a small squadron of English ships to assist, together with the Russian and Turkish forces, Cardinal Ruffo, to retake from the republicans the castles into which they had withdrawn.‡ Foote observes:—

* This is admitted by Sir H. Nicolas, (p. 492,) who corrects the mistake he had fallen into, by trusting to the twin biographers of Nelson, Clarke and M^rArthur, who blundered on this, as they do on most other important occasions.

† Letter to Lord Keith, of June 27th, 1799. (iii. 391.)

‡ The command of the ships in the Bay of Naples, had devolved on Foote on the 17th of May.—*Vindication*, p. 108.

"It was my duty to consider that the getting possession of Castel Nuovo, and dell' Ovo, would very much expedite the reduction of Fort St. Elmo, which commands the town of Naples, and was wholly garrisoned by French troops. Besides, from all the intelligence received, I had much more reason to expect the French than the British fleet in the Bay of Naples. . . . The two great objects were, to restore his Sicilian Majesty to his dominions, and to drive the French out of Italy. . . . Considering that, in the then situation of affairs, it was of great consequence to get possession of the Castles, and still more to prevent the least appearance of disunion [among the allies,] I determined not to throw any obstacle in the way of obtaining the two great objects to which I have before alluded."*

Ruffo was well aware that the appearance of a superior French fleet in the Bay of Naples would have been the destruction of the royalists; and he knew also that the banditti and cut-throats whom he led were more likely to plunder their friends than fight their enemies.† Foote, foreseeing what might happen if the "Christian army" entered Naples, wrote to Nelson on the 5th of June, requesting that some regular troops should be sent, ‡

"to prevent the anarchy that must take place if the royalists, of themselves, get possession of Naples; an event by no means to be desired, as there is no saying what pillage and disorder would ensue; as few, if any, of these armed people receive any regular pay; and, consequently, are obliged to subsist by rapine and plunder, which, I fear, has given the country people but too much reason to complain of their conduct. With all submission to the better judgment of my superiors, I beg leave to recommend the offering a *free pardon*, because, when throwing the dice for kingdoms, personal animosities, jealousies, and every trifling object, should be disregarded."§

These humane and eminently politic sentiments, met with the entire approbation of Lord Nelson, so far as their political part went; for as to the prevention of pillage and plunder, he did not feel much concern. His answer, dated June 8th, is as follows:—

"I agree in all the sentiments you express in your letters relative to the affairs of Naples; a few regular troops would do the business in better order, but not more efficaciously than the royalists."||

These words imply an approbation of Foote's sentiments as to the *free pardon* (the italics are Foote's) which he suggests; a

* CAPTAIN FOOTE'S *Vindication of his Conduct*, page 24—26, 2d edit. 1810.

† Nelson knew it as well. See his letter to Troubridge, April 25, 1799.—iii. 333.

‡ This determined the sending of the Prince Royal, who was, however, obliged to put back to Sicily, as we have seen.

§ *Vindication*, page 124.

|| *Vindication*, page 126.

circumstance which deserves particular notice. The "efficaciousness" of the royalists in doing the business when they entered Naples, was shown to Nelson's heart's content. What Mr. Fox said in his place in the House of Commons, on the 3d of February, 1800, was true, without the slightest exaggeration :—

"Not only the miserable victims of the rage and brutality of the fanatics were savagely murdered, but in many instances their flesh was eaten and devoured by the cannibals who are the advocates and the instruments of the social order."*

This is what Lord Nelson meant when he spoke of the business being done "more efficaciously" by the royalists, though not with "the good order" of regular troops. Encouraged by the approbation of Lord Nelson, Captain Foote, after attacking Castel a Mare, granted a capitulation to the garrison, the substance of which was, that the whole of the garrisons and crews of the flotilla should lay down their arms. The republicans asked, moreover, that it should be left

"to their option to go where they think proper; and, relying on British generosity, they trust you (Captain Foote) will receive such of them on board your ship as think proper to avail themselves of the protection of the British flag."

These terms were granted by Foote.† To the garrison, both of Castel a Mare, and of Ravigliano, he had previously proposed to receive them as prisoners of war, with a promise, on his word of honour, "to intercede with his Sicilian Majesty in their behalf." These terms were accepted by the garrison of Ravigliano. That of Castel a Mare wanted to leave the fortress with military honours, be released on their word of honour, allowed to go home, "and their safety guaranteed in the name of the Kings of Great Britain and Sicily."‡ As Foote gave no answer to that proposal, the other was made, which, we have seen, was eventually consented to. Neither the garrison of Ravigliano, nor that of Castel a Mare, was promised that their members might either be safely sent to France, or be allowed to remain at Naples unmolested, nor were their lives and property guaranteed.§ They were simply allowed, as far as Foote was concerned, to go where they

* "Durante l'assedio dei castelli, il popolo Napolitano unito agl' insorgenti commise delle barbarie che fan fremere ; incrudeli fin anco contro le donne ; alzò nelle pubbliche piazze dei roghi, ove si cuocevano le membra degl' infelici parte gittati vivi, e parte moribondi."—Saggio Stor. Sulla Rivoluz. di Napoli, 2d edit. Mil. 1810. It is written by Cuoco, an eye-witness.

† *Vindication*, p. 158.

‡ *Vindication*, p. 155-157.

§ All this was especially and solemnly granted to the garrisons of Castel Nuova, and Castel dell' Uovo, by Foote, and treacherously refused by Nelson, as we shall see. Here we only wish to point out the difference of the terms.

liked; the utmost he had bound himself to do was "to intercede in their behalf," which, on their part, meant, that they threw themselves on the king's mercy, but had no right, in strict justice, to claim exemption from abiding the consequence of whatever criminal prosecution the royal government might institute against them.*

Foote had every reason to think that the granting capitulations on humane and generous terms would be approved of by the Neapolitan government. There is a letter of Sir John Acton to Sir William Hamilton, dated the 20th of June 1799, and published at length in the Nelson Dispatches—(iii., 391,) whilst Foote (p. 139) had published only a portion of it—in which we find that the Republicans were charged with having broken a truce

"granted at their desire for the capitulation of the Castles [dell'] Uovo, Nuovo, and of St. Elmo. These last, however, seem willing to hear of terms, but the Republicans are making continual *sorties* from the Castles, and S. Martino. The Cardinal seems in a disagreeable position. His Majesty, on this circumstance especially, accepts of the kind offer of Lord Nelson, to present himself before Naples, and procure the intimation for surrendering, to be supported by the English fleet. Its appearance, and the certainty of the French being distant, would certainly produce the desired effect. I hurry this answer, my dear sir, for the expedition of Lord Nelson. . . . I return to you Captain Foote's letter, of which I have taken copy. I do not know whether he has granted the demands of the rebel officers to go free to their families. His intimation was for surrendering prisoners of war. If Captain Foote has kept to his declaration, then these prisoners might come to Sicily, when they shall be ordered to Africa,† till further orders."

Sir W. Hamilton, on forwarding this letter to Lord Nelson, wrote to him—

"The offer your Lordship made in your letter‡ was to take place when you had a certainty of the French fleet being disposed of somehow; and General Acton has had your letter to me, and I have not seen him, so you may decide your own way; for we are under no kind of engagement."

* Foote did intercede for them, and his intercession was successful. His humane and generous efforts are used by the editor of the Dispatches to attack his honesty—

"Why did not Captain Foote make a similar exertion in favour of the garrisons of [Castel dell'] Uovo, and Nuovo?"—(iii. 519.) Why? because these had a *RIGHT* to go freely to France, and to be left unmolested, according to the capitulation; whilst the garrisons of Ravigliano and Castel a Mare had *no such right*, but had only trusted to the intercession of Foote—who had promised it, and kept his word—for *mercy*. How can the editor say that the terms granted to the latter were very similar to those granted to the former?

† So in the Nelson Dispatches; but in Foote it is Ustica, a Sicilian fortress, not Africa, that is mentioned.

‡ This letter has not been found, probably because Acton, to whom it was forwarded, never returned it.

These letters help us to appreciate Nelson's conduct on his arrival in the Bay of Naples. They prove incontrovertibly : 1st, that the Neapolitan Government wished the Castles to capitulate : 2d, that so far from the King of Naples having invested Lord Nelson with the supreme command, or with extraordinary powers as his representative, he merely accepted the unasked-for assistance offered by the English admiral to support with his fleet the intimation for surrender to be made to the Castles—a support the more welcome, and a capitulation the more desirable, as the Cardinal was in a disagreeable position : 3d, that Lord Nelson was under no kind of engagement, and was at liberty to go to the Bay of Naples to give the proffered assistance or not, as he liked best : 4th, that the Neapolitan Government, when doubting whether Captain Foote had granted to the rebel officers permission to go home, had not expressed the slightest objection to the grant, either on the score of justice and expediency, or on that of want of power in Foote for granting such terms. And, on the most unfavourable supposition to the patriots, that they had surrendered as prisoners of war, Acton wrote that they would be sent to Ustica “till further orders,” which orders could not be supposed to be to put them to death at leisure, such not being the treatment which is reserved for persons who are received as prisoners of war.

On the 16th of June 1797, Nelson sailed from Sicily in search of the French fleet.* For very good reasons, which we need not repeat, he returned to Palermo, and on the 21st landed there for a couple of hours, saw the King, the Queen, and General Acton, and, having taken on board Sir William and Lady Hamilton, he sailed for the Bay of Naples, where he anchored about nine o'clock on the evening of the 24th. In that bay he wrote what he called, “Opinion delivered before I saw the treaty of armistice, &c., only from reports at sea.”† And having found a flag of truce flying on board the *Sea-horse*, he made the signal to have it hauled down, before having had any conversation with Captain Foote.‡ That opinion begins thus :—

“The armistice, I take for granted, is, that if the French and rebels

* It was then that he wrote to Lady Hamilton the letter, printed among the Dispatches as if it were written June 16th, 1800, in which he speaks of being “from her house to a hog-stye of a cabin.” In 1800, on the 16th of June, Lady Hamilton and the Queen of Naples were with Nelson at Leghorn. See vol. iv. p. 252 and 253.

† These important words are added in the copy in the State Paper Office, in Nelson's own hand. It is curious that the copyist should have omitted them, if in the original from which he copied, as well as the words at the end, “Read, and explained, and rejected by the Cardinal,” also added in Lord Nelson's hand. One would likewise be glad to see the letter in which the copy of the “Observations” was inclosed when sent to England.

‡ *Vindication*, p. 71.

are not relieved by their friends in twenty-one days," &c.—Vol. iii., p. 384.

Now, if Lord Nelson had waited for positive information, instead of taking for granted what he wished, in order to shed blood, he would have found, what he did not wish either to find or to respect, a capitulation, not an armistice, solemnly signed and, so far as possible, actually executed. Cardinal Ruffo intended to re-establish the king on his throne; but he wrote to the governor of Procida,—

"According to my opinion, we must not drive the principal Jacobins of Naples to despair, but must rather leave them the means of escape."^{*}

His leaning towards mild measures in preference to harsh ones to restore the kingly authority, was well known to Nelson and Hamilton; for the latter in a letter to the former, dated June 20th,[†] says,—

"Your Lordship observes, that what we suspected of the Cardinal has proved true; and I dare say when the capitulation of Naples comes to this court, their Sicilian Majesties' dignity will be mortified." Yet with this foreknowledge "their Sicilian Majesties" did not revoke the powers of vicar-general granted to Ruffo,—powers, by the very essence of the office, of the most ample, or rather of an unlimited description. Foote, partly led by political and military considerations, and partly by his humane and truly liberal feelings, coincided with the Cardinal's views:—

"At the moment of these capitulations, the French fleet, and not the English, was expected in the Bay of Naples! To secure these castles was of importance. To conciliate contending minds was the duty of all men, when excesses the most sanguinary were in constant perpetration: so far I was friendly to the Cardinal's measures."[‡]

When, therefore, Foote learnt that Nelson's squadron had sailed on the 16th of June in search of the French, he wrote to Nelson himself a letter, begun on the 18th of that month, in which he says, that having been informed of the change of destination of Lord Nelson's squadron, (which, as we have said, was coming

^{*} CLARKE and M'ARTHUR, ii. 257, who call this conduct of the Cardinal "highly disgraceful to his sacred character." No nation or country has produced, within this century, so ignorant or so dishonest historians as these two.

[†] Probably a fragment of the same letter of which part has been already quoted. Clarke and M'Arthur, p. 263, from whom this fragment is taken, say that Nelson was then (on the 20th of June) on the point of sailing from Palermo! But if we were to point out all the instances of shameful carelessness, and wilful disregard of truth, with which their work abounds, we should write a volume.

[‡] *Vindication*, p. 82. See also p. 83, *et seq.*

to Naples with the Crown Prince on board, but was obliged to put back to Sicily), he had

"sent Captain Oswald to the Cardinal to represent the absolute necessity of getting possession of the castles, even by granting favourable terms."*

In this he had been forestalled by the Cardinal, who on the previous day (June 17th) wrote to him that he thought that all was going on well, that the castles would surrender, but as they objected to surrender to a priest,† he added,—

"Let your Excellency's flags be displayed, and I believe they (the rebels) will yield at the sight of them. Send your orders on shore that hostilities may cease as the treaty commences. The conditions are simple and plain enough. It is granted to the French to be carried back by sea to France, with their effects and property, at his majesty's expense; and those who are not French are allowed the liberty of following them."‡

There was a good deal of negotiation between the agent of the king of Naples, Micheroux,§ and the commander of the Russian forces, on the side of the allies, and the officers and agents of the republicans, on the other. Foote grew impatient, and remonstrated against the delay. Lastly, on the 20th, the terms on which the capitulation of the castles Nuovo and dell' Uovo was to be granted were settled and signed by Foote, and early on the 23d of June he put his name to a formally drawn up document, which had been previously signed by Ruffo, as vicar-general of the kingdom, and then by the Russian and Turkish commanders, in which the following articles occurred:—

"Art. 4. Persons and property, both movable and immovable, of every individual of the two garrisons, shall be respected and guaranteed. Art. 5. All the said individuals shall have their choice of embarking on board of cartels which shall be furnished them to go to Toulon, or of remaining at Naples, without being molested either in their persons or families. Art. 6. The conditions contained in the present capitulation, are common to every person of both sexes now in the forts. Art. 7. The same conditions shall take place with respect to the prisoners which the troops of his majesty, the King of the two Sicilies, and those of his allies, may have made of the republican troops in the different engagements which took place before the

* *Vindication*, p. 136.

† The real objection was, that they did not think he had the power of restraining his motley followers from breaking any capitulation that he might have granted.

‡ *Vindication*, p. 178.

§ To show Clarke's ignorance, it is only necessary to say, that had it not been for Foote undeceiving him, he was going to attack Micheroux as the republican negotiator.

blockade of the forts. Art. 8. Messieurs the Archbishop of Salerno, of Micheroux, of Dillon, and the Bishop of Avellino detained in the forts, shall be put in the hands of the commandant of the Fort St. Elmo, where they shall remain as hostages until the arrival of the individuals sent to Toulon be ascertained. Art. 9. All the other hostages, or state prisoners, confined in the two forts, shall be set at liberty immediately after the present capitulation is signed.”*

The confidence in the honour of England was such, that the republicans expressly stipulated to be escorted to Toulon by a British man-of-war,† to which service the Bull-dog was destined. The cartels were getting ready, the hostages had been sent to St. Elmo, the other state prisoners were set at liberty, the English prisoners of war were given up, a flag of truce was flying, pending the execution of the capitulation, signed thirty-six hours before, which, as far as possible, had been carried into effect,‡ when Lord Nelson arrived in the Bay of Naples, and ordered the truce to be put an end to, without any notification whatever to the enemy. Afterwards, Foote says,—

“The garrisons of [Castel dell’] Uovo and Nuovo were taken out of those castles under the pretence of putting the capitulation I had signed into execution (which, after having annulled the treaty, must appear truly singular), and some of those unfortunate people were treated with very great severity.”§

This horrible fact is again affirmed by the same officer :—

“Although nothing had been done in the execution of the terms agreed upon, it [the capitulation] was equally binding on all the contracting parties; the truth, however, is, that some parts of the agreement had been performed, and actual advantage was afterwards taken of those parts of the capitulation that had been executed, to seize the unhappy men who were thus deceived by the sacred pledge of a capitulation into a surrender of everything that can affect a human being in the most critical moments of his existence.”||

It is in defence of this act of perfidy, to the atrocious consequences of which we shall presently call the reader’s attention,

* From Foote’s *Vindication*, p. 197.

† *Vindication*, p. 141.

‡ The editor of the *Dispatches* repeatedly relies on what he calls “the important fact,” that the capitulation was not even begun to be carried into effect before the arrival of Nelson, (pp. 495 and 511;) but, as Foote asks, “Does the non-execution of a capitulation in any degree justify the least infringement of its most trifling article?”—(*Vindication*, p. 77.) The editor, however, had himself admitted before, that “the important fact” was no fact at all; for he had said :—“Although the capitulation was signed by Captain Foote, the last of the contracting parties, early in the morning of the 23d, little, if any thing, had been done towards carrying it into execution before Lord Nelson’s arrival,” (p. 483.) A little was done, probably! How much ought it to have been? Foote says, it was “a formal capitulation, signed, and in part executed, before Lord Nelson arrived in the Bay of Naples.”—*Vindication*, p. 86.

§ *Vindication*, p. 39.

|| *Vindication*, p. 48.

that the editor of Lord Nelson's Dispatches raises his voice ! He admits the capitulation, but, as we have seen, seems inclined to draw some inference in favour of the man who broke it, from its not having begun to be executed. We have also seen that he is wrong in fact, and that, if even he were right, no consequence could be drawn from it in favour of Nelson's conduct. Nelson himself once said of a capitulation signed, but not yet executed,—"The capitulation once signed, there was no room for dispute."—(iii. 433.)* No one has ever publicly asserted that Foote acted against his instructions, and it is only in England, and among Englishmen, that it has been pretended that Ruffo acted against his Sovereign's intentions and orders in treating. It has even been said that "a private letter from the King to Ruffo amply supports this assertion."—(*Clarke and M'Arthur*, ii. 256.) This letter of the King of Naples is mentioned for the first time in one of Clarke's to Captain Foote, after this gallant and truly honourable man had, on the 18th of March 1809, written to Clarke :—

"I beg to be excused for controverting whatever may insinuate that I was imposed upon by anything said or done by Cardinal Ruffo in the transactions of the Bay of Naples, in the summer of the year 1799. I could not be imposed upon, because my instructions directed me to co-operate with the Cardinal, who was retained in the most important situation, from which he could have been removed in forty-eight hours.

. . . . Nothing can be more evident than the fact that a solemn capitulation had been agreed upon, formally signed by the Commander of the Forces of the King of Naples,† by the Russian commander and by myself, all duly authorized to sign any capitulation in the absence of superior powers."

In answer, Clarke, *ten days* after, having, as he says, "really been almost laid on his beam-ends" by that letter, speaks of papers in general that have come out, which support Nelson, and adds :—"There is a letter from the King to Ruffo, in which his Majesty upbraids him for daring to treat with rebels, directly contrary to his orders." Neither the letter itself, nor any part of it, nor the date, nor the place from which it was written, have

* This capitulation had been signed by Girardon who commanded at Capua, both for Capua and Gaeta. The commander of Gaeta, Berger, very naturally refused to abide by an agreement to which he had not been a party, for which Lord Nelson, with his peculiar politeness, called him, in a letter to Captain Louis, "scoundrel."—(iii. p. 431 and 433.) This Sir Harris Nicolas applied to Girardon, supposing him commander of Gaeta. Captain Louis, to whom afterwards Gaeta surrendered, had the generosity to render justice to Berger ; in writing to Nelson he said—"I assure you that the Frenchman I have been dealing with, has acted more unlike one than any I ever met."—CLARKE and M'ARTHUR, ii. 299.

† Ruffo, as Vicario-Generale, was a great deal more. The Vicario-Generale is invested with the fullest royal power, *ut alter ego*, as it is technically expressed by the sovereign, on appointing to such an exalted office.

ever been given. It is then mentioned again twenty days later by the same Clarke, as "the King of Sicily's private letter, *in his own hand, to Ruffo*," (the italics are Clarke's,)* and lastly in the Life, as quoted above. Supposing the letter to exist, one cannot understand how "private" letters to a superior military authority can nullify public acts and solemn engagements. Moreover, "the King of Naples' secret orders† to Ruffo have nothing to do with a capitulation sanctioned by a British officer, and to which the national faith was unquestionably pledged."‡ That the King of Naples disavowed Ruffo is too true,§ but he did so when on board the Foudroyant, under the complete power (we are ashamed to state the fact, but it is undeniable) of Nelson, the Hamiltons, and Acton, all English people. It was by their advice and influence only that all the severe measures were taken; of this there is ample evidence in the several biographies of Nelson, and in his letters; it was on board the Foudroyant, and surrounded by Englishmen, that the King of Naples passed the most atrocious edicts that perhaps ever disgraced a statute-book.|| Even the personal enemies of Ferdinand considered him as the prisoner of Nelson; and to the English admiral was not unjustly ascribed the cruelty of the king.¶ With respect to the disavowal of Ruffo, circumstances tend unhappily to confirm the suspicion, that this was only owing to Nelson's influence, he being too interested in destroying the Cardinal's credit. It was at this time, when on board Nelson's ship that the King of Naples announced his intention of creating the Admiral Duke of Bronte; ** but, on returning to Sicily,

* Foote's *Vindication*, pp. 49 and 56. How can it be true that a private letter in the King's own hand to Ruffo was among the Nelson papers? If true, it must be equally true that Ruffo never received it. Of the unscrupulousness of Clarke and M^r Arthur in forging letters, see a proof in the Nelson Dispatches, ii. 406.

† "Nelson acted as he thought right from being in possession of the King's secret orders to Ruffo."—CLARKE. *Vindication*, p. 57.

‡ *Vindication*, p. 60.

§ "The King on his arrival [in the Bay of Naples] publicly disavowed any authority having been delegated to Ruffo to treat with subjects in rebellion."—*Clarke and M^r Arthur*, ii. 275.

|| The reader may find their substance in Colletta, lib. v., cap. 1, § 2. They are also in Cuoco's *Saggio*, § 49, who records the almost incredible fact, that although hundreds of people were condemned, even to death, in consequence of these edicts, they were, however, not published.

¶ *Saggio Storico*, § xlix. Nelson himself acknowledged that long before, when the King was at Palermo—therefore not so completely in his power as on board the Foudroyant—there was nothing which he proposed that was not implicitly complied with, (iii. 325.) In his letter to Davison, when complaining of Mr. Fox's speech respecting the breach of the capitulation, he made the following admission: "the whole affairs of the kingdom of Naples were, at the time alluded to, absolutely placed in my hands," (iii. 510.)

** *Clarke and M^r Arthur*, (ii. 314.)

that same king not only continued Ruffo in his high situation, but rewarded him with a salary of 24,000 ducats, (more than £3000 sterling,) and as much again in yearly revenue from lands which he bestowed on him,* besides letters of thanks and rewards to a brother of his. Ruffo continued in his office till he went to the Conclave at Venice for the election of a successor to Pius VI. Now, all this proves that, *when left to himself*, the king was far from disavowing Ruffo, or being dissatisfied with what he had done;—which is as good an argument in favour of the Cardinal's correct conduct, as the rewards promised to Nelson, *when on board his ship*—rewards on which the editor of the *Dispatches* relies in defence of his hero—(iii. 493,) are a good argument in favour of the conduct of the Admiral. Besides all this, we have seen (pp. 423, 426, and 427,) that both Nelson, and the Ministers of the King of Naples, approved of terms being granted to the Republicans when the castles were on the point of capitulating. It is therefore utterly untrue that Ruffo had acted contrary to the king's orders in granting such terms as he had done, with the concurrence of Foote and the Allies. But, supposing Ruffo had exceeded his instructions, what right had Nelson to annul his acts? Had he a right to break the capitulation signed by Foote? Nelson had never been invested with higher powers than Ruffo's—such a thing could not be: he could only have superseded him. The letter of the king—to which we have alluded (p. 421,)—was not a solemn act, capable of producing such an effect, even for the special circumstance for which it was intended. So far from being sent to the Bay of Naples by the king, and with supreme power, Nelson volunteered to go there† when he could; and, as Hamilton wrote to him, he was under no kind of engagement. The king, when full of gratitude and pouring rewards on him, expressed himself as follows:—

“Your powerful co-operation having rendered the forces of my faithful soldiers efficacious, as well as that of my allies who are united with them.”—(iii. 438.)

His instructions were to co-operate with the allies, and no more (Clarke and M'Arthur, ii. 168); and, on the 27th of July 1799, the Admiralty repeatedly speak of his co-operation with the Sicilian army—(iii. 410). If the king of Naples had appointed him to govern his kingdom—if he had intrusted

* Colletta, lib. v. cap. 1, § 8.

† This is proved from the documents quoted, p. 425, and from the letter of Nelson to Keith of 27th June, in which, after having related what he had done since the 16th, to find the French fleet, he proceeds—“I determined to offer myself for the service of Naples, where I knew the French fleet intended going.” Whettier he went after the French or after Lady Hamilton, whom he took on board on the 21st of June at Palermo, may be doubted: that he did not go by order, or as a representative, commander, or minister of the King of Naples, is certain.

him with the supreme command over his army and his navy—could Nelson have accepted such eminent and responsible offices without the special leave of his king? As to disavowing Foote, he could not legally do it; for this officer, as he himself states, was “as fully authorized to sign such a treaty as Lord Nelson; for he was as much under Lord St. Vincent as I was under him.”*

Nelson did not do so in point of fact; on the contrary, he praised Foote for what he had done; and it afforded him “infinite pleasure” to convey to Foote a distinguished mark of his Sicilian Majesty’s approbation “for most important services when left with the command in the Bay of Naples”†—one of which services was to sign the capitulation by which the king repossessed himself of the castles so often mentioned.

This would render it quite superfluous to notice all that the learned editor says “anent the law of breaking capitulations,” were it not necessary to show that there is not the slightest foundation for asserting that such villainies are sanctioned by the law of nations. Before considering the point of law, it is to be borne in mind, that though Nelson, of his own accord, and without any assigned ground, broke the capitulation, yet with his own officers, or with Ruffo, he never pretended to have the right to do so. From first to last, when he knew the truth as well as we know it, he having among his own papers the capitulation itself, Nelson carefully and shamefully avoided to use the name “capitulation,” to make the world believe there was no such thing. He first of all called it an armistice, then a treaty,‡ but never a capitulation; nor did he ever venture to say that he broke it as such, and in virtue of his powers. If he had done so, he would have been obliged to say that Foote had acted out of the limits

* *Vindication*, p. 77.

† *Dispatches*, iv. 17. In a private letter to Alexander Stephens, dated February 10, 1803, Nelson did not scruple to say what he knew was not true, and what he never dared say to Foote, or in any official document, that that officer had no power to enter into any treaty. He had the power, by the very fact of being at the head of the English forces, as far as the binding of England went. Stephens did not believe Nelson, as is evident from his history, in which he omits altogether to speak of Caracciolo’s murder.

‡ All capitulations are, in one sense, *treaties*, as they cannot be drawn up and be agreed upon except after *treating* or negotiating; but all treaties are not capitulations. A treaty of commerce or of peace requires special powers to be negotiated, and a ratification previous to its being perfect and binding; and of course the proper supreme power may disavow a negotiator of such an act; but a military capitulation is an act which requires no special powers, the commission which an officer holds being a proof of his having such powers; nor does it want ratification. Nelson, with great cunning, tried to make a military capitulation pass for a civil and political treaty, by never calling it by its proper and technical name. He did more: when he found that agreement designated as a capitulation, he alleged that it was no capitulation, because, he having broken it, had prevented its execution!

of his charge, and promised terms which he was not warranted to promise by his commission ; and this he well knew he could not say. Nelson never having pretended to set aside, in a formal and solemn manner, a formal and solemn military capitulation, it is superfluous to discuss whether, had he been a commander-in-chief, he had the power of doing so ? If the whole of the writers on public law were to affirm so monstrous a proposition, we should not mind : no authority can legalize a villany. A general besieges a fortress, he considers it important to possess himself of it before it is relieved ; and with this view he solemnly offers the best terms he can, which are as solemnly accepted. Thirty-six hours after, when no relief is any longer to be apprehended, a superior officer comes and puts aside the capitulation, on the plea that he who signed it had no powers. Who has ever dreamt of asking the commander of a siege to show his powers of granting terms ? Who has ever heard of powers being required ? To deceive an enemy, it would only be necessary to find an unscrupulous agent, *ad hoc*, give him all the appearance of command and power, denying to him the substance ; or send an honourable man to conclude a capitulation, and then find a Nelson ready to break it, and there would be no more safe agreement between military authorities. An agreement would only be a decoy, a delusion, and a snare ; and a military capitulation for the surrender of a fortress, (as well as a military agreement for any other purpose) would be an impossibility. No author ever defended principles so monstrously immoral. What the authors quoted by the learned editor say, is, that an officer must not exceed the powers or attributions of his office. Thus, if a general, in taking possession of a fortress, were to agree that it shall be restored at the general peace, or that the sovereign shall never enter its walls without the consent of the enemy who evacuates it, then he would exceed the attributions of his office, and his promise be void ; but the other party could not complain of the non-observance of terms, which the party who agreed to them had manifestly no power to stipulate, being out of the sphere of his attributions.*

The two instances referred to by Sir H. Nicolas of capitulations set aside, are of no weight, because no number of perfidies can authorize one, and because the cases are totally different. Rapp agreed on the 29th of Nov. 1813, to give up Dantzic on the 1st of Jan. 1814, the garrison to be prisoners of war, and taken to France under promise of not serving till exchanged. On the 23d of Dec. 1813, at 11 o'clock of the evening, the Duke of Wurtemberg, a general in the Russian service, who commanded the

* Vattel, liv. iii. ch. 16, § 261-263.

siege and had agreed to the capitulation, informed Rapp that the Emperor Alexander would not consent that the garrison should be allowed to return to France on parole. All the other parts of the capitulation were held sacred. The reason that determined Alexander, was the knowledge, that the parole had been broken in former cases, and might be broken in this. The determination of the Emperor was communicated most solemnly, and in the most gentlemanlike terms to Rapp, who having still possession of the place, was free to determine what he pleased.* The Duke of Wurtemberg gave him that fair warning which Nelson never gave to the poor Neapolitan republicans; and yet Rapp and all the French writers have complained of this as of a breach of faith. The case of Gouvion Saint Cyr, also quoted by Sir Harris, is still more inconclusive. General Klenau agreed to a capitulation on terms which he was not authorized to grant; but he had taken care, previously, to inform Gouvion Saint Cyr of this, who, therefore, knowing that he treated with a person who had not the power of signing what he did, had no reason whatever to complain of the general-in-chief of the allied armies, when he refused to abide by an act, the illegality of which was beforehand known to those who signed it.† It was, however, offered to restore him to the same situation in which he was when he signed the agreement with Klenau, whereas Nelson possessed himself of the castles, taking advantage of the capitulation, and under pretence of carrying it into execution.

Nelson has been very anxious to make people believe that the republicans left the castles with the full knowledge that he had annulled the capitulation; but there is no proof of it. On the contrary, the negative is proved so far as a negative is capable of proof. On his arrival in the Bay of Naples, Nelson ‡

“sent Captains Troubridge and Ball to the Cardinal Vicar-General, to represent to his Eminence my opinion of the infamous terms entered into with the rebels, and also two papers which I enclose.§ His

* “Le Duc de Wurtemberg m’offrait de remettre les choses dans leur premier état,” says Rapp in his *Memoirs*.

† The letter of Schwarzenberg, annulling the capitulation, was published by the present Lord Westmoreland in his “*Memoirs of the operations of the Allied Armies*.” 2nd edition, p. 325.

‡ Troubridge and Ball went on the 25th of June; for Nelson under that date writes to Duckworth, “Troubridge and Ball are gone to the Cardinal,” which implies they were still with him at the time Nelson wrote.—iii. 387.

§ One of these papers from a copy in the State Paper Office, (how and when did it get there!) is as follows:—“Declaration sent to the Neapolitan Jacobins in the castle of Uovo and Nuovo. His Britannic Majesty’s ship Foudroyant, Naples Bay, 25th June, 1799. Rear-admiral Lord Nelson, K.B., Commander of his Britannic Majesty’s Fleet in the Bay of Naples, acquaints the rebellious subjects of his Sicilian Majesty in the castles of Uovo and Nuovo, that he will not permit them

Eminence said, that he would send no papers, but if I pleased I might break the armistice, for that he was tired of his situation. Captain Troubridge then asked his Eminence this plain question: If Lord Nelson breaks the armistice, will your Eminence assist him in his attack on the castles? His answer was clear: I will neither assist him with men nor guns. After much communication* his Eminence desired to come on board to speak with me on his situation. I used every argument in my power to convince him that the treaty and armistice was at an end by the arrival of the fleet,—but an admiral is no match in talking with a cardinal. I therefore gave him my opinion in writing, viz., Rear-admiral Lord Nelson, who arrived in the Bay of Naples on the 24th of June with the British fleet, found a treaty entered into with the rebels, which he is of opinion ought not to be carried into execution without the approbation of his Sicilian Majesty, Earl St. Vincent—Lord Keith.”† “Under this opinion the rebels came out of the castles which was (sic) instantly occupied by the marines.”—iii. 392.

If it be true, that the “rebels,” as they are called, came out of the castles under this opinion, why was not the approbation of Lord Keith asked, before delivering those, who surrendered, into the hands of their executioners, as if no “treaty” had been entered into—as if Lord Keith had disapproved of the one which, on Nelson’s own showing, ought to have been carried into execution with that gallant and truly noble man’s approbation?

to embark or quit those places. They must surrender themselves to his Majesty’s Royal mercy.” How is it that a copy of so important a paper is not among the Nelson papers, nor in his order-book, or letter-book? The second paper is an intimation to the Commander of St. Elmo, and that is in the order-book of Nelson:—both written and sent at the same time, to the same person, and yet only one of them entered in the order-book!

* Troubridge and Ball went at least twice to the Cardinal; on the 25th first, then on the 26th. This results from a letter without date, but supposed by the editor (iii. 394,) to be of the 28th of June, addressed to the Cardinal; but as Nelson says in it that he “will land 1200 men” to go against castle St. Elmo, “under the present armistice” (how far it was fair to land forces under an armistice may well be doubted) and in the letter to Keith, he says, that Troubridge and Ball with 1300 men had already landed on the 27th, (the date of the letter) it is clear that the letter to the Cardinal was written on the 26th. It begins thus: “I am just honoured with your Eminence’s letter, and as his Excellency, Sir W. Hamilton wrote to you this morning, that I will on no consideration break the armistice entered into by you, I hope your Eminence will be satisfied that I am supporting your ideas. I send once more Captains Troubridge and Ball,” &c. Can any perfidy equal that of the man who broke the truce the moment he arrived and yet wanted to lull the Cardinal into a belief that he did not mean to do so! And can we wonder at the poor republicans being entrapped into a belief, that the armistice and the capitulation were to be observed?

† This document has no date, in the letter to Keith, but a copy with very slight alterations, (which, however, are enough to make one doubt the authenticity of the document, for if ever one original existed, all the copies would be alike,) is printed (iii. 388) from the order-book, and is dated June 26th. In that copy, moreover, the document is shorter: it ends with the words, “Sicilian Majesty,” and the most important ones, “Earl St. Vincent—Lord Keith,” are wholly omitted.

Did Nelson ever ask the approbation which he alleged to be necessary? Had he asked it, he would have certainly obtained it from Lord Keith, who, at a later period, strongly condemned the conduct of Nelson;* and who, at the very time that Nelson degraded himself so much, wrote to advise just concessions and humane measures; but, alas! his letter is a barren monument of his own goodness and noble-mindedness, and the most solemn condemnation of the dishonourable conduct of him to whom it was addressed, and by whom it was disregarded. As to the declaration which Nelson said that he had "sent to the Neapolitan Jacobins" in the castles,—When was it sent? by whom was it sent? to whom was it sent? by whom, and to whom, was it delivered? These are most important questions; for the sending it after possession had been taken of the forts, or before—sending it with or without authority—sending it to the commanders of the forts, or to an unauthorized person—having it delivered by and to the right, or to a wrong person, according to the usages of war—affect most materially its legality. There is not the slightest proof that any declaration at all was ever sent to any one by any body. The Cardinal went on board the *Foudroyant* on the 26th of June, as is proved by the date of the opinion above transcribed; which opinion Nelson, in his letter to Lord Keith, says he gave to the Cardinal when on board.† Ruffo, we know, was stoutly for observing the capitulation, and had previously refused to send any paper to the republicans. These unhappy victims of treachery left the castles on the evening of the 26th, that is, a few hours after receiving the declaration (if Nelson's story were true) that they were to "come out and be hanged." Is it credible, that, being aware of the fate that awaited them, they would have been in such a hurry? Would they not have remonstrated against the breach of a solemn capitulation? would they not have begged for mercy? would they not have put off to the very last the evil moment? We learn from their petitions and from their historians, that they came out on the faith and honour of England, having capitulated; the English officer who signed that capitulation, and who had pledged that faith and that honour, tells us that "these men did not surrender without capitulation."‡ Surely, these are the best witnesses that could be brought forward; to shake their evidence something more is required than an utterly unsupported, and, as far as can be proved, utterly

* Clarke and M'Arthur, ii. 268; and Foote's *Vindication*, p. 57 and 87.

† Harrison, writing under the eyes of Lady Hamilton, who was present, and acted as interpreter between Ruffo and Nelson, says that Nelson wrote his opinion in the presence of Ruffo.—*Life of Nelson*, vol. ii. p. 100.

‡ *Vindication*, p. 77.

unfounded assertion of the man who is guilty of having betrayed them.

Some of the unfortunate sufferers were put in irons on board the very ships that were to take them to Toulon, according to the capitulation; others were also put in irons on board English men-of-war, the English sailors and marines being their gaolers and keepers. By what law or principle English ships could be turned into prisons of the King of Naples, and English admirals and officers the keepers of those prisons, no one knows. According to law, and to all acknowledged principles,—a man-of-war being considered as part of the territory of the nation to which it belongs,—far from being prisons, the English men-of-war ought to have been, and were legally, an asylum where no Neapolitan, for crimes committed out of the British dominions could be kept in prison, any more than if he had come to London. It was not for the king of England, for his courts, or for his officers, to punish offences against the King of Naples.* The sufferings of the prisoners were of the most cruel description; and not content with seizing them treacherously, treating them cruelly, and keeping them in irons for no crime against the laws of his country, Nelson went so far as to act as commissary of police to the King of Naples, and actually got some of the prisoners brought on board the *Foudroyant* to be examined.†

The victims of Nelson's treachery were delivered up to what was called a giunta—that is tools of the government—to be tried. Yet even this giunta thought, that all those against whom nothing could be proved previous to the kingdom falling into the hands of the French, as well as those who had capitulated, could not be punished. This did not satisfy the party anxious for executions; a less delicate giunta was appointed, one of whose first acts was to fix the pay of the executioner by the month, instead of continuing it by the job, as was previously the case; a significant index of what might be expected from that court. The proceedings were such as in this country are not only unknown but incredible and incomprehensible. The accuser could be witness;—the accused never saw either the one or the other;—he

* The editor of the *Dispatches* says, (iii. 498.) that these prisoners were "simply detained as prisoners until the king's arrival, when Lord Nelson's interference with them entirely ceased." What Nelson could do worse than detaining them not simply as prisoners, but in irons—a gratuitous piece of barbarity—till they were given up to punishment, except murdering them himself at once, as he did Caracciolo, one cannot see. That these prisoners were not in the custody of English soldiers, after the arrival of the king of Naples on board the *Foudroyant*, is a mistake. The prisoners were delivered up to the Neapolitan guards only about the 8th of August, as stated in a letter of Troubridge of this date.—CLARKE and McARTHUR, ii. 308.

† "Tuesday, [July] 2d. Several of the rebel party were brought on board for examination."—*Log-Book of the Foudroyant*, iii. 508.

did not know even their names;—he was not at liberty to choose his own counsel;—the judges pronounced sentence in private without giving any reason for their determination;—the sentence was not only without appeal, but might be carried into execution on the very day it was passed:—

“It would be too long and too painful to detail the wicked deeds of tyrants, and the miserable state of the sufferers. There were more than 300 of the most distinguished persons in the kingdom put to death; among them Caraffa, Riario, Colonna, Caracciolo, five Pignatelli, and at least twenty more of noble houses; next to them men distinguished for learning and scientific attainments, such as Cirillo, Pagano, Conforti, Russo, Ciaia, Fiorentino, Baffi, Falconeri, Logoteta, de Filippis, Albanese, Bagni, Neri, and many more; then men remarkable for their station in society, such as Federici, Massa, Mantonè, the Bishops Sarno, Natale, Troise, a respectable lady like Pimentel, and a most miserable one like Sanfelice. Serra and Riario were beheaded, though under twenty years of age, and Genzano, under sixteen.”*

These were a few of the murders committed in consequence of Nelson’s treachery, and with his approbation. There is no doubt that a word of his would have put an end to all these infamies; and there is still less doubt that these wholesale executions pleased him, as well as Lady Hamilton and her imbecile husband. On hearing that thirteen poor wretches had been hanged at Procida, he wrote—

“Your news of the hanging of thirteen Jacobins gave us [that is himself and the Hamiltons, in whose house he was living,] great pleasure; and the three priests, I hope, return in the Aurora to dangle on the best tree adapted to their weight of sins.”†

The universal misery brought on the people by the villains reinstated in power by Nelson’s exertions are incredible. We shall give accounts of that misery in Captain Troubridge’s words:—

“August 20th.—To-day eleven of the principal Jacobins, princes, dukes, commoners, and ladies were executed. I sincerely hope they will soon finish on a great scale, and then pass an Act of Oblivion. Death is a trifle to the prisons.”‡—“August 30th.—Five of the Jacobins were hung yesterday, and 190 sent to Gaeta to thin the prisons, which are now getting very full.”§—“All dread reform, I mean the people in office; the villanies are so deeply rooted that if some method is not taken to dig them out, this government cannot hold together.

* *Colletta*, v. 1. 6.

† *Dispatches*, iii. 376. Compare this savage exultation with the short and reluctant notice officially taken by Foote of the same transaction—“Thirteen Jacobins were hanged at Procida yesterday afternoon, and the bearer of this has charge of three condemned priests who are to be degraded at Palermo, and then sent back to be executed.”—*Vindication*, p. 122.

‡ *Clarke and M^r Arthur*, ii. 310.

§ *Id.* ii. 311.

Out of twenty millions of ducats collected as revenue, only thirteen millions reach the treasury."*—"The letters from Palermo mention the feasting and the immense sums of money that are spent there. . . . They must finish soon, or every family here [at Naples] will be interested in making a disturbance. They should make some examples and pass an Act of Oblivion, and let all be forgot. At present, there are upwards of 40,000 families who have relations confined."
 "The innocent and guilty are all afraid of being accused and thrown into jail; and, probably, of having their houses plundered when set at liberty after a considerable time, with nothing to exist on. Constant efforts are made to get a man taken up, in order to rob him. I have seen many instances which induce me to make this representation. . . . The property of the Jacobins is selling for nothing; and his [the King's] own people, whom he employs, are buying it up, and the vagabonds pocket the whole."†

Nelson, in the meantime, enjoyed himself at Palermo, partook of the feasting along with the Hamiltons, and along with them shared the extravagant rewards which the king showered on them at the cost of a nation, which they had been chiefly instrumental in ruining. The hero of the Nile was parading his criminal intercourse, and sacrificing to a vile woman his glory, his honour, and the interest of his country! Malta was besieged, but not by him; Minorca was protected, but not by him; the coast of Egypt was blockaded, but not by him; the French were expelled from the Roman States, but not by him; whilst the captains, under his orders, gathered laurels, he lived at Palermo gambling all night.‡ His secrets, which might involve the success of an expedition, or the safety of a fleet, were betrayed,§ and the contents of his letters divulged.|| He was informed of all this, and still went on. The Government at home, aware of his strange infatuation, sent out Lord Keith to command in the Mediterranean—a step that they would scarcely have taken if they had not known that Nelson was beside himself. Keith, after having seen with his own eyes¶ what was going on, directed Lord Nelson to take the command of the siege of Malta, and gave such orders as might prevent him from coming back to Palermo; but Nelson left the siege under pretence of bad health, and returned to that capital. On the very day that Keith ordered him to remain in command at Malta, 24th February 1800, Troubridge entreated

* *Clarke and M^r Arthur*, ii. 312.

† *Id.* ii. 339.

‡ *Clarke and M^r Arthur*, ii. 355.

§ *Id.* ii. 311.

|| *Id.* ii. 361.

¶ Nelson received the order to put himself under Keith on the 6th of January 1800; on the 16th of the same month he went to Leghorn from Palermo, where he returned with Keith.

him most earnestly not to go to Sicily,* and soon after that, a very friendly and very plain letter came to him from Admiral Goodall, telling him with as much grace as frankness, that his infatuation was known in England.† At last, on learning that he had quitted the station off Malta to go to Palermo, orders were sent to Lord Keith, authorizing Nelson to come home, and, at the same time, Lord Spencer, in a most beautiful and friendly letter to Nelson himself, informed him‡ that the Admiralty did not wish to recall him, but that, if he could not keep afloat, he had much better come home at once, than stay at Palermo, and that such was the opinion of all his friends. As Hamilton had been recalled, and was coming home, there was no difficulty in persuading Nelson to return with him to England—for Lady Hamilton was of the party.

It is impossible for any one to say, after all this, that Lord Spencer approved of Lord Nelson's conduct. Nelson was treated with all the delicacy and respect which his great services at Aboukir deserved; but his conduct was certainly not approved of. Had the whole truth been known to him, there is no doubt that a nobleman of Lord Spencer's honour, would have taken serious notice of what had happened. The learned editor informs us, that by a letter of Lord Spencer, "written soon after, and evidently with reference to Nelson's proceedings at Naples,"§ "*all Nelson's proceedings seem to have been fully approved of.*"—(iii. 509.) What grounds the editor had for saying that this letter was written "evidently with reference" to the proceedings at Naples, we don't know; but this we do know, that the letter has "evidently" no reference whatever to the dishonourable conduct of Nelson at Naples. The passage in Lord Spencer's letter, on which the editor relies, is as follows:—

"Admiralty, 7th October 1799.—My Dear Lord, in answer to your letter of the 23d of July, which did not reach me till the 26th of last month, I can only now repeat what I believe I have before said on the subject, namely, that the intentions and motives by which all your measures have been governed, have been as pure and good as their success has been complete."

* *Dispatches*, iv. 196.¹

† The letter was written on the 15th of November 1799, the day Lord Keith sailed to take the command in the Mediterranean. The part here alluded to is as follows:—"They say here you are Rinaldo in the arms of Armida, and that it requires the firmness of an Ubaldo and his brother knight to draw you from the enchantress. To be sure it is a very pleasant attraction, to which I am very sensible myself; but my maxim has always been, *cupidus voluptatum: cupidior gloria.*"—*Dispatches*, iv. 204.

‡ *Dispatches*, iv. 242.

§ *Preface* to vol. iii. p. x.

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Of course the tenor of the letter of Nelson of July 23, received by Lord Spencer on the 26th Sept. must be ascertained, to understand which were the measures approved of in the answer. Sir H. Nicolas informs us that "no letter to Lord Spencer of the 23d of July, has been found, nor is there any trace of such a letter in his letter-book; it [i.e. the date] may have been a mistake for the 13th, on which Lord Nelson wrote an important letter to him. Vide p. 406 ante."* The letter at page 406 speaks of an end put "to an infamous treaty entered into with the rebels, in direct disobedience to his Sicilian Majesty's orders,"† and informs Lord Spencer, that "the rebels came out of the castles . . . without any honours;"‡ but it does not state that there was a capitulation signed by an English officer—Captain Foote—nor is the murder of Caracciolo even hinted at.§ To what would the

* *Dispatches*, iii. 509.

† This was not true. The disobedience to orders, even if true, did not concern Foote, who signed, without having any orders to the contrary. Nelson knew it well. It was in consequence of the publication of this "infamous" and concealed attack on his character that Foote wrote his "Vindication." This very honourable and gallant officer did not expose Nelson's conduct till after the publication of this letter, not wishing, as he himself says, by so doing, to act injuriously to his country, and because "all those who were acquainted with the true state of the case, and who regarded the character of Lord Nelson, or the reputation of the country, saw the necessity of burying the whole transaction in oblivion, as far as that could be done," p. 10. His generous forbearance is made the ground of very unwarrantable attacks on the part of the Editor of the *Dispatches*, who, forgetting, as usual, that he himself has published all the necessary documents for Foote's defence, asks why Foote did not make to Nelson suitable representations between the 24th and 28th of June, when he was a daily witness of the infraction of the capitulation? (iii. 517.) Nelson arrived in the Bay of Naples on the evening of the 24th of June, and he then asked from Foote a statement of his proceedings. That statement cannot have been given in before the 25th. On that and on the following day, Nelson and Ruffo discussed between themselves whether the capitulation should be observed. So far from any one suspecting it would be broken, the parties most concerned surrendered in execution of the capitulation, and, under the pretence of executing it, possession was taken of the castles on the evening of the 26th. On the 27th, Foote wrote to Lord Nelson, saying, "he should have waited upon Lord Nelson instead of writing, were he not extremely unwell," p. 518, so that he could not know the infamies that were going to take place, nor was he in a state of health fit to remonstrate. On the afternoon of that day, he sailed from the Bay of Naples (Log-book of the *Sea-horse* in vol. iii. p. 494), being sent out of the way by Lord Nelson, who thus took from him the opportunity of remonstrating before his remonstrances were too late. Foote was not, therefore, a witness of the infraction of the capitulation, nor was he in a position to remonstrate.

‡ This is also untrue. "The Russian troops allowed the garrison [of Castel Nuovo] to depart with the honours of war, laying down their arms on the side of the marine arsenal, where they were embarked in vessels to be taken to Toulon." These are the words of a petition to Nelson (partly printed, iii. 495 of the *Dispatches*), by some of the unhappy beings whom he betrayed, and whom he has the effrontery to say came out of the castles at mercy and without honours. The Russian Government was always for the fulfilment of the capitulation. *Saggio Stor.* § 49. The editor of the *Dispatches* will be glad to find there the evidence of this fact which he seemed to wish, vol. iii. p. 511.

§ Nelson always and carefully avoided to speak, in his *Dispatches*, of Caracciolo's execution. He once only alluded to it in a postscript to a letter to Lord Keith, in the

approbation of Lord Spencer amount, if he was not aware of the dishonourable parts of the transactions which he approved? The assumption that Lord Spencer answered to this particular letter of the 13th, when he said he answered to one of the 23d of July, has no foundation, but in Sir H. Nicolas' fancy. Why should it not be in answer to another letter of the 13th of July, which occurs in the same volume (p. 408)? The letter which Lord Spencer answered, was received by him on the 26th of September; and the letter to which the editor fancies he answered was written on the 13th of July, and sent by Lieutenant Parkinson, who was in it recommended for promotion. Now Parkinson having arrived at Yarmouth on the 9th of August (Vol. iv. p. 20), was promoted before the 20th of the same month,* consequently he must have delivered his letter to Lord Spencer long before the 26th of September. It is due to the memory of this nobleman to acquit him of any approbation whatever, either of the treachery, or of the murder of Caracciolo, with which the name of Lord Nelson stands charged.

We have postponed to enter into the history of this murder, from the reluctance that one naturally feels to show that that unparalleled crime not only is proved by the apologist himself indefensible, but appears, on reflection, and when all its circumstances are considered, much worse than it has been hitherto universally believed. The facts are as follow:—

When the King of Naples fled to Sicily, abandoning his Continental States to the enemy, Francisco Caracciolo, a cadet of one of the most illustrious families in existence, and at the head of the Neapolitan navy, followed his king, as we have seen, to that island. His character stood very high among our own naval officers, to whom he was well known, having commanded, for a time, a Neapolitan seventy-four, (*Il Tancredi*,) one of Admiral Hotham's squadron, with which Caracciolo took part in the actions of the 12th, 13th, and 14th of March 1795. He was, therefore, a companion-in-arms of Nelson.† We have also mentioned, that he returned to Naples with the king's permission, and, of

following few words,—“Caracciolo was executed on board His Majesty's Ship *Minerva*, on the 29th of June;” but he omits to say that it was by his orders, and on board his own ship, that that base murder was concocted. See iii. 393.

* *Dispatches*, iii. 410.

† Lord St. Vincent wrote of him to Acton in the following terms:—“I have great obligations to the Chevalier Caracciolo for giving protection to the trade bound from Leghorn to Naples and Civita Vecchia lately, the escort having been found too weak to encounter the French privateers in the Channel of Piombino without his aid; and I have every other reason to be satisfied with his conduct during the short time the *Tancredi* has been under my orders; and I greatly lament the necessity I am under to part with him.” 2d April 1796.—*BRENTON'S Life of St. Vincent*, i. 169.

course, no longer in his service.* He was then obliged to take service under the Government of Naples, from which he received protection;† and, on various occasions, he commanded some boats which fired at the English and Sicilian ships at war with the Neapolitan Republic. Before Nelson arrived in the Bay of Naples, Caracciolo—if we are to believe the biographers of Nelson‡—had already left the castles, and was at Calvirrano on the 23d of June, whence he wrote to implore Ruffo's protection, through the Duke of Calvirrano, from being murdered by the "Christian army," and admitting "that he was bound to account for his actions to those who should be legally authorized by his Sicilian Majesty."|| Then they say, "he escaped to the mountains—an action which by no means displayed the confidence of an honest mind;" as if a man, however innocent, could trust to the assassins who shot those whom they thought guilty, and who presented the heads of those whom they murdered to our naval officers, who received most graciously such revolting presents. "A price was immediately set on his head"—that is, a reward offered to any one who should assassinate him—"and, on the 29th of June 1799, before the arrival of the king from Palermo, this nobleman was brought in the disguise of a peasant, about nine o'clock in the morning, alongside Nelson's flag-ship, the *Foudroyant*." The first question is: How did it happen that Caracciolo was brought from shore, where the king's authority was re-established, to an English man-of-war? If a price had been set on his head, his being taken to the ship would lead one to suppose that it was there that the reward was expected to be paid; but we believe that the "price set on his head" is one of the usual groundless statements of the biographers. Caracciolo was

* Caracciolo fu solennemente congedato dal Re. Saggio Stor. § 37.

† Troubridge wrote to Nelson, on the 9th of April 1799, that Caracciolo had refused service, (iii. 329,) and, on the 18th, that he was "forced to act" as he did (334); and Nelson himself wrote on the 29th, that he (Nelson) believed him no Jacobin in his heart—341. And although Troubridge wrote, on the 1st of May, that he was satisfied that Caracciolo was "a Jacobin," he was obliged to admit, on the 7th of the same month, that "Caracciolo saved Sorrento and Castell a Mare from being burnt."—358. Our navy were the allies of the cut-throats that plundered and murdered: Caracciolo, who preserved his fellow-countrymen's lives and property, was murdered by order of our Admiral, Nelson!!!

‡ Clarke and M'Arthur, ii. 269. If this be true, Caracciolo cannot have left the castles without the knowledge and the assistance of the besiegers, who, we learn from a letter of Ruffo, published by Foote, (*Vindication*, p. 184,) whilst the capitulation was negotiating, had placed officers round the castles to receive those who chose to withdraw, "to assure them that they shall be forgiven."

|| The original letter, or even a translation, has never been published; and this summary by such biographers is little to be relied on. Suppose Caracciolo said that "he was ready to account," instead of saying that he was "bound." That he was "bound," he need not have said; but to say "he was ready," was saying something both new and important to himself. But who was the Duke of Calvirrano? Where is the place itself?

betrayed by a servant. Colletta states, that Nelson asked Caracciolo from Ruffo, and that it was supposed he did so to save him.* This seems the most probable version. If Nelson did not offer money to get Caracciolo into his hands, he must have had recourse to some other means for the purpose. The people who took Caracciolo were not under the orders of Nelson, but of Ruffo, whose prisoner Caracciolo was. It was natural to think that Nelson intended to save him, because no one would then suspect an Englishman, still less an admiral, of unworthy motives; and because that very day, June 29th, Nelson gave notice to all those who had served the Republic, that if, within twenty-four hours for those in the city of Naples, and forty-eight hours for those within five miles of it, they did not trust to the clemency of his Sicilian Majesty, he would treat them as rebels. What passed on that fatal day is only learned from Caracciolo's enemies; and even their account has been most industriously mutilated by the apologists of Nelson. This renders it difficult to know how Nelson possessed himself of Caracciolo's person. It may have been in consequence of a request of Caracciolo himself, trusting to the honour of an Englishman, and a companion-in-arms. This much is certain: that, had not Nelson wished it, he had no occasion whatever to receive Caracciolo on board the *Foudroyant*.

Be that, however, as it may, Caracciolo by nine o'clock A.M. of the 29th of June, was taken on board the *Foudroyant*, by a mob of assassins, his hands tied behind his back, and with difficulty preserved from the indignities of our allies, by Sir Thomas Hardy, who immediately ordered him to be unbound, and offered him refreshments, which were refused. Nelson at once, it is said, issued the following warrant, addressed to Count de Thurn, commodore and commander of his Sicilian Majesty's frigate, *La Minerva*:—

“Whereas Francisco Caracciolo, a commodore in the service of his Sicilian Majesty, has been taken, and stands accused of rebellion against his lawful sovereign, and for firing at his colours hoisted on board his Majesty's frigate, *La Minerva*, under your command, You are, therefore, hereby required and directed to assemble five of the senior officers under your command, yourself presiding, and proceed to inquire whether the crime with which the said Francisco Caracciolo stands charged, can be proved against him, and if the charge is proved, you are to report to me what punishment he ought to suffer.”

No time seems to have been lost by Nelson; for by ten o'clock, what is called the trial, was begun on board the *Foudroyant*.

* Lib. v., chap. 1, § 4.

Within one hour, from nine to ten o'clock, the warrant was issued—communicated to De Thurn—five officers collected, and the work begun. The warrant states what was notoriously false, viz., that Caracciolo was “a commodore in the service of his Sicilian Majesty,” for he had resigned and had returned to Naples with the king’s permission long before; and, if no longer in the service, it is difficult to see why not only Nelson, WHO HAD NO AUTHORITY WHATEVER, but any one else could order him to be tried by five or six naval officers. He was accused, Nelson says, of rebellion, and for firing at the Sicilian colours flying in the Minerva, which are *two* crimes, though the inquiry was to be, whether *the crime* could be proved—and which crime it was, no one knows. Who was the accuser no one knows. Nelson says, “Caracciolo stands accused” without saying to whom and by whom. Only it is remarkable, that on Caracciolo arriving on board the Foudroyant, the accuser is as ready as the person who listens to him. De Thurn commanded the Minerva: he was most likely the accuser, as he was the most important witness—and he, the President of what is called a court, was thus judge, accuser, and witness. The five officers whom he was to choose, could not be of a high rank, as there was no Neapolitan fleet in existence: but who they were and what they were, no one has ever known—possibly men against whom Caracciolo had fired, and therefore as impartial as their President: they also were at hand.

What is called the warrant, directs De Thurn and his associates to proceed *not* to try, but to *proceed* TO INQUIRE whether the crime can be proved against Caracciolo, and if the charge is proved, to report to Nelson what punishment he ought to suffer. The court, therefore, that Nelson constituted, was a court of inquiry, not a court-martial—a court which was *to report*, that is to say, to give an opinion as to the punishment, but not award it. Hence it is, that its members are said to have assembled on board the Foudroyant—an English man-of-war, that is, part of England—in which no foreign tribunal can be legally constituted, and acknowledged in its judicial capacity, but where, by an abuse of power, no doubt, an inquiry might be held purposely to save a man’s life. The biographers of Nelson, without quoting any authority, tell us that

“during the trial, which lasted from ten o’clock to twelve o’clock, the wardroom of the Foudroyant was open, as is customary, to every one who chose to enter. Some account of what passed, has therefore been preserved.* Everything appeared to be fairly and honourably conducted.”

* The logic of these twin biographers is exquisite. The wardroom was open, therefore we have some account of what passed therein. Better state who went in, and what they say.

They do not tell us who accused Caracciolo—by whom he was advised—what witnesses and proofs were brought against him—what witnesses and evidence were heard in his defence. They only tell us, that a man of a great family—of unspotted character, in his seventieth year, was suddenly taken among foreigners, and within three hours—without trial—without sentence, doomed to die.

For it is a mockery and a falsehood to say, that Caracciolo was tried by court-martial. The warrant of Nelson—who had no power to issue, and probably did not then issue any warrant at all—was for holding a court of inquiry;—that he issued even such a warrant, is extremely doubtful; only a copy of it is to be found in “the Nelson papers,” but not in the order-book; if *the warrant had been actually issued*, it was too important not to be entered. The narrative of a trial, by Clarke and M^rArthur, is a poetical invention of those unscrupulous historians who, in the face of the warrant which they first printed, had the courage to assert that Nelson had assembled “a court-martial.” Colletta who, though he had had the best sources of information, and had known and conversed on these events with Sir T. Hardy, had never seen the warrant—speaks of a court-martial being assembled, in which the warrant proves him to be mistaken, but relates that,

“having heard the accusation and the defence, the court thought it would be right to see the documents and hear the witnesses for the defence, but Nelson wrote, ‘there needed not any further delay.’ And then that senate of slaves condemned Caracciolo to imprisonment for life; but Nelson having learned the sentence from De Thurn, answered—*death*—and death was substituted for imprisonment.”—v. 1, 2.

What “this senate of slaves” ought to have done is easily said; but were they free to give safely what opinion they liked, unprotected, on board a foreign man-of-war, commanded by a foreign admiral, who had broken a capitulation, and turned the ships of his nation into prisons, and *bureaux* of inquisition? Their commissions, their liberty, their lives, were as much in Nelson’s hands as the life of Caracciolo. Our opinion is that the often-mentioned warrant is an after-thought—a document prepared to guard against the consequences of the murder after its perpetration—that such Neapolitan officers as, besides De Thurn, (and he was a German, and not a Genoese, as has been said in this country,) were called on board the *Foudroyant* to give an opinion, never passed a sentence, but were overruled by Nelson, if they attempted to save the life of their illustrious countryman, by suggesting imprisonment, in the hope of better days. The real judges, accusers, and witnesses, were Lady Hamilton, Lord Nelson and De Thurn, that is, three foreigners, on board a foreign ship, and supported by foreign arms.

Immediately after what is called the trial was over, that is at about twelve o'clock, Nelson issued another warrant, which is in the "Order-Book" in the following words:—

"To Commodore Count Thurn, Commander of his Sicilian Majesty's frigate *La Minerva*.—Whereas a board of Naval Officers of his Sicilian Majesty, hath been assembled to try Francisco Caracciolo for rebellion against his lawful sovereign, and for firing at his Sicilian Majesty's frigate *La Minerva*; and whereas the said board of naval officers have found the charge of rebellion fully proved against him, and have sentenced the said Caracciolo to suffer death, you are hereby required and directed to cause the said sentence of death to be carried into execution upon the said Francisco Caracciolo accordingly, by hanging him at the foreyard-arm of his Sicilian Majesty's frigate *La Minerva*, under your command, at five o'clock this evening, and to cause him to hang there till sunset, when you will have his body cut down, and thrown into the sea."

It is observable how contradictory Nelson would be if the first warrant was authentic. He says, in the second warrant, that a board of officers has been assembled, but he does not say by whom; then he adds that they were assembled "to try Caracciolo," and that they "sentenced" him, whilst in the first warrant they are assembled merely to inquire and report. At the same time he avoids stating who these officers were, how many they were, and where they had met. Then they are a "board of naval officers," not a court-martial, and they find the charge of rebellion proved, but they say nothing of Caracciolo firing at the *Minerva*. However, Nelson says they sentenced him to death. WHERE IS THE SENTENCE? Has any one ever seen it, or heard where it was to be seen? Never. If a "board" or "court" of any sort really agreed to any report or sentence whatever, where is it? Can it be believed that Nelson, who kept the report of the execution of Caracciolo—which the editor has carefully printed, (iii. 399)—would not have kept either the report which he had directed should be made to himself, or the sentence which he says was passed, if either had ever existed?

The rest of this authentic second warrant betrays such a disregard of all decency, that it is hardly credible. Why—supposing even the whole procedure legal and fair, and Nelson the proper authority for seeing the judgment executed,—why the unprecedented haste in having Caracciolo put to death, five hours after a trial which lasted two, and for which he had only a few minutes to prepare? Why take from the King of Naples the power of pardoning, by murdering the man at once? The King was at Palermo—in twenty-four hours an answer would have reached Nelson—why not wait, and submit to him the sentence if it existed? And why the brutality of ordering a man of Caracciolo's

birth and rank to be hanged, and his body denied the melancholy privilege of a Christian burial? * Contrast the noble conduct of the unhappy victim with that of his impatient murderer—

“I am an old man,” said Caracciolo to Lieutenant Parkinson, “I leave no family to lament my death, I therefore cannot be supposed to be very anxious about prolonging my life; but the disgrace of being hanged is dreadful to me.”

He asked Parkinson to intercede with Nelson that he might be shot!! and the noble lord refused, because, forsooth, “Caracciolo had been fairly tried by the officers of his own country.”† Can hypocrisy and cruelty go further? Alas! Caracciolo was not “tried” by order of his country, nor in his country, any more than by officers of his country. Lady Hamilton, who was on board, and who undoubtedly witnessed the execution of Caracciolo, could not be found when Parkinson tried to interest her in obtaining this last favour from Nelson.

The Admiral and Lady Hamilton had the base satisfaction of seeing the order fully executed.‡ Persons have been at a loss to account for so much atrocity and hatred. Some have pretended that it was owing to envy and ill-will on Nelson’s part towards Caracciolo; the most charitable have attributed it to a kind of spell of Lady Hamilton on Nelson, who was blinded by his passion for

* This brutality is officially and authentically proved to be Nelson’s own. Thurn’s report to Nelson of Caracciolo’s murder is in the following words—“Admiral Nelson is informed that the sentence on Francisco Caracciolo has been carried into execution in the manner which he has directed.”—(iii. 399.) So that the sentence did not prescribe the kind of death; this at all events is confessedly Nelson’s own doing.

† The Editor of the Dispatches says (p. 501) that Caracciolo appealed to Nelson “for pardon;” he ought to have known that there is no authority for this statement. Nor is it true he pleaded “for mercy” to the Duke of Calvirrano. He implored “protection” from the assassins, our allies. Of Nelson he asked a second trial, and then the favour of being shot, and not “pardon.” There is not one letter of Nelson, or one authentic word of his granting or imploring pardon for any one—not one word of mercy—not one word of pity for those whom he betrayed, and whom he assisted to murder.

‡ Some days after Caracciolo’s body had been thrown into the sea (July 15th or 16th,) as the Foudroyant, with the King of Naples then on board, stood out at sea, the body of Caracciolo was seen erect, out of the water to the waist, making its way towards the ship. The king, terrified at the horrible and reproaching sight, asked in a hurried manner, “what does he want?” The chaplain answered him as became a minister of religion: “I should say that he comes to implore a Christian burial.” “Let him have it, let him have it,” was the king’s answer; and he retired to his room thoughtful and terrified. (Colletta, v. 1. 6.)—But the English admiral, the English minister, and the lady, soon made the king forget the mild answer of the poor priest, well calculated to inspire humane sentiments. The body floated in that extraordinary manner, owing to three double-headed shot, weighing 250 lbs., which were tied to its feet when it was thrown into the sea. The weight forced the body into an upright position, though it was not enough to prevent its rising to the surface, as it was intended to do.

her; and this seems the most probable cause of his conduct. As to her it has been supposed that she was moved by her ambition to satisfy the revengeful disposition of *her friend* the Queen of Naples, added to her detestation of the Neapolitan nobility, who refused to receive her in their houses on account of her profligate life.* But the apologist will not hear of these excuses, and stands boldly forward in defence of all that was done. In what capacity Nelson acted "has not been ascertained," he says; yet he assumes that he probably acted as Commander-in-chief of the Sicilian squadron, as if probabilities—for which there is no ground—were enough to prove that a man had power to order another to be put to death; he sees no objection either to the constitution of the Court, or to the trial—if there had been one—taking place on board the *Foudroyant*, where Caracciolo was conveyed from his own country, and from under the authorities of his Sovereign. He assumes also that Caracciolo fired upon the *Minerva*, though the warrant for his execution, the only authentic document in existence signed by Nelson respecting this murder, says expressly that he was *accused* of it, but does not say that this was *proved* against him. Sir H. Nicolas is a barrister; will he stake his professional reputation on the legality of such proceedings? But Nelson may have had good intentions. Why, did he not know right from wrong? Had he not the feeling that capitulations were not to be broken any more than men hanged without trial, and without legal authority? But Nelson had a great horror of republicans and rebels; and so had Robespierre of royalists and aristocrats, and what of that? It is not by

* The Editor of the Dispatches, after having taken so much trouble in making the apology of his hero, very gallantly enters the lists in defence of the heroine. As to the Queen, it may be worth observing, that on the fatal 29th of June, Nelson sent to Palermo the Portuguese sloop *Balloon* with dispatches, to be delivered with all expedition "to her Sicilian Majesty in person," with directions to wait for an answer, and by no means to chase anything either in going or returning—(iii. 397.) This shows the importance of the dispatches thus sent. And yet, not a trace of them, or of any answer. He will not admit that Nelson's judgment, previous to the arrival of the king, was perverted by Lady Hamilton—(iii. 498)—and why he should say so, except, because Nelson himself declares, that when he disobeyed Lord Keith's orders, after the king was on board, he did so of his own accord—(iii. 409) no one can tell. He is particularly angry at Capt. Brenton for having stated that he "had heard that Lady Hamilton, in her last moments, uttered the most agonizing screams of repentance for this act of cruelty (the murder of Caracciolo.) The prince (Caracciolo) was ever before her eyes"—(iii. 520.) The editor declares, upon the authority of "a lady" who lived many years with Lady Hamilton, and who scarcely ever quitted her room during the last few weeks of her life, that Lady Hamilton never screamed or felt remorse. We are sorry for it, and for "a lady" too, who—supposing it was not her duty to attend Lady Hamilton, in which case she is not an impartial witness—gives this evidence. A great admirer and personal friend of Nelson, who was near Lady Hamilton when she died, says that "her last hours were passed in wild ravings, in which the name of Caracciolo was frequently distinguished."—*Life of Nelson*, by the Old Sailor, p. 485

treachery and assassinations that the cause of the throne and of rational liberty is supported. Englishmen have warmly applauded, and splendidly rewarded the important services of Nelson against the enemies of his country, but the generous love of justice, the fairness, the manliness, for which they are distinguished above all nations, will make them see through the unfair statements, and the flimsy arguments by which it is vainly attempted to defend the deplorable and infamous conduct of that admiral; the more they are made acquainted with the circumstances of the case, the more will they feel disgusted with his behaviour, and disavow any attempt to justify or palliate crimes which ought to have been buried in oblivion, out of charity to the memory of the guilty party, who owes it only to the indiscretion of his friends that they cannot now ever be forgotten or forgiven.

ART. VII.—*An Essay on the Miracles recorded in the Ecclesiastical History of the Early Ages.* By JOHN HENRY NEWMAN, B.D., Fellow of Oriel College. Oxford, 1843. 1 vol. 8vo. *Lives of the English Saints.* London, 1844-45. 14 Nos. 18mo.

WE do not envy the feelings with which a sincere and intelligent Roman Catholic enters upon an explanation of the miracles recorded and believed in his Church. Everything human has its weak points; and the Christian beholds with sorrow the strifes and divisions, and other cankering sores, which mar even the fair face of the religion of love. In his contest with external enemies, he naturally seeks to avoid a theme so ungrateful; and he must be weak indeed, or nobly strong, who would set them in the first front of battle. But a harder task awaits the champion of the "Legends of the Saints." It is his, not to palliate, defend, or explain, but to glorify corruptions; to treat them, not as abuses, or excrescences, but as the characteristics of his Church; and to appeal to them in the most solemn manner as direct interpositions of the Almighty hand of God, in proof of His presence and favour. It must be the very gall of bitterness for a noble and devout nature to be driven to such necessity. We need not wonder, therefore, that the more enlightened in the Church of Rome either altogether avoid, or, when that is impossible, hesitate, qualify, and, with some sweeping commendation of faith, turn shrinkingly away from the bare enunciation of her miracles. Even the least scrupulous controversialists appeal to them for the most part generally, and in the gross; and the image bows its head, and the relic works its charm, only to the eyes of the faithful.

In their case there is much to mourn over, and something to pardon. The credulous, the timid, and the ignorant, almost unconsciously acquiesce in practices and opinions familiar to them from infancy, recommended by general consent, hallowed by religion, and enforced and protected by penalties the most severe. The more reflecting "wink hard," or take refuge in infidelity, or make what shift they can with the arrow in their sides. The Essay of Mr. Newman is an attempt to induce Protestants voluntarily to place themselves in this most painful and unhappy condition; and by way of encouragement, he has put the yoke on his own neck.

There is perhaps nothing in profane antiquity which lays such strong hold on the higher sympathies of our nature, as the story of the Roman wife, who drew the dagger reeking from her own bosom, and gave it to her husband, saying, "It is not painful, Pætus!" Overpowered by the evidence of such surpassing affection, it requires a painful effort to pass judgment on her splendid crime. Yet though it may seem a harder thing for a sincere Protestant minister to believe in the miracles of Benedict of Nursia, or St. Simeon of the Pillar, than to lay down his life for a dear friend, the effect on the world is altogether different: and ere men listen to the assurance, and follow the example of Mr. Newman, he must not be surprized should they look into the matter for themselves, and resolve thereupon to throw the dagger away;—nay, should even tell him, that the only danger lay in using it.

Nor is Mr. Newman so borne away by his own enthusiasm as to be unprepared for such an emergency. The traveller on his way to Rome cannot avoid the supernatural narratives of the early ages; and if he can overcome the difficulties of the fourth and fifth centuries, the rest of his path is comparatively easy. These difficulties, however, are so formidable, that according to Mr. Newman's own showing, it is inconsiderate, and even wanton, to venture amongst them without a guide.

"It will naturally suggest itself to him to form some judgment upon them, and a perplexity, perhaps a painful perplexity, may ensue from the difficulty of doing so. This being the case, it is inconsiderate and almost wanton to bring such subjects before him, without making at least the attempt to assist him in disposing of them." —P. 12.

The attempt is accordingly made in his *Essay on Miracles*, prefixed to the first volume of Fleury's *Ecclesiastical History*, where such supernatural narratives abound;—in many cases judiciously improved, and ingeniously altered from their original and authentic form, yet still perplexing enough to the modern reader.

It is a grave question whether the power of working miracles extended beyond the Apostolic age; or rather whether the evi-

dence for any miracle, not recorded in Scripture, has sufficient weight to enforce from the Christian a complete and reasonable belief. All that is most precious to him—his consolations in time, his hopes for eternity, depend for their existence on the Scripture miracles. “If,” says the Apostle, “Christ be not risen, then is our preaching vain, and your faith is also vain.”—1 Cor. xv. 14. The evidence for their truth, therefore, must needs be powerful: and, as derived from the origin, increase, and reception of Christianity, and the lives, deaths, characters, and writings of the first disciples and their followers, it is most certainly powerful and overwhelming. It is needless to state that there is no such evidence for the miracles which are said to have followed them, and which Mr. Newman happily terms “the Ecclesiastical Miracles.” There is indeed a heaven-wide distinction between the two, in their nature, in their objects, and in the evidence by which they are respectively supported; and this is so admirably illustrated by Mr. Newman, that we shall quote his account of it at length.

“The miracles wrought in times subsequent to the Apostles are of a very different character, viewed as a whole, from those of Scripture viewed as a whole; so much so, that some writers have not scrupled to say, that if they really took place, *they must be considered as forming another dispensation*;* and, at least, they are in some sense supplementary to the Apostolic. This will be evident both on a survey of some of them, and by referring to the language used by the Fathers of the Church concerning them.

“The Scripture miracles are for the most part evidences of a Divine revelation, and that for the sake of those who have not yet been instructed in it, and in order to the instruction of multitudes: but the miracles which follow have sometimes no discoverable or direct object, or but a slight object; they happen for the sake of individuals, and of those who are already Christians, or for purposes already effected, as far as we can judge, by the miracles of Scripture. The Scripture miracles are wrought by persons consciously exercising under Divine guidance a power committed to them for definite ends, professing to be immediate messengers from heaven, and to be evidencing their mission by their miracles: whereas Ecclesiastical miracles are not so much wrought as displayed, being effected by Divine power without any visible media of operation at all, or by inanimate or material media, as relics and shrines, or by instruments who did not know at the time what they were effecting, or, if they were hoping and praying for such supernatural blessing, at least did not know when they were to be used as instruments, when not. We find the gift often committed, in the words of Middleton, ‘not to the successors of the Apostles, to the Bishops, the Martyrs, or the principal champions of the Christian cause, but to boys, to women, and above all, to private and obscure laymen, not only of an inferior, but sometimes also of a

* *Vid.* MIDDLETON'S *Inquiry*, p. 24. et al. CAMPBELL ON *Miracles*, p. 121.

bad character.* The miracles of Scripture are, as a whole, grave, simple, and majestic: those of Ecclesiastical history often partake of what may not unfitly be called a romantic character, and of that wildness and inequality which enters into the notion of romance. The miracles of Scripture are undeniably of a supernatural character: those of Ecclesiastical history are often scarcely more than extraordinary accidents or coincidences, or events which seem to betray exaggerations or errors in the statement. The miracles of Scripture are definite and whole transactions, drawn out and carried through from first to last, with beginning and ending, clear, complete, and compact in the narrative, separated from extraneous matter, and consigned to authentic statements: whereas the Ecclesiastical for the most part are not contained in any authoritative form or original document; at best they need to be extracted from merely historical works, and often are only floating rumours, popular traditions, vague, various, inconsistent in detail, tales which only *happen* to have survived, or which in the course of years obtained a permanent place in local usages or in particular rites or in certain spots, recorded at a distance from the time and country when and where they profess to have occurred, and brought into shape only by the juxtaposition of distinct informants. Moreover, in Ecclesiastical history true and false miracles are mixed: whereas in Scripture, inspiration has selected the true to the exclusion of all others."—Pp. 24, 25.

In connexion with this statement, he adds, (p. 62.)—

"Should any one urge, as was stated in a former place, that the Ecclesiastical miracles virtually form a new dispensation, we need not deny it in the sense in which the Prophetical miracles are distinct from the Mosaic."

And, to make the matter perfectly clear, he goes on to assert that the Ecclesiastical miracles "seem but parallel, as they are contemporaneous, to the development, additions, and *changes in dogmatic statements*, which have occurred between the apostolic and the present age." Now, there is in these two statements a very material apparent discrepancy between the nature of these miracles, and the agency assigned to them; but there is something far more remarkable than any discrepancy, in the deliberate assertion, that a new dispensation, with a change of dogmatic statements, has been introduced by Ecclesiastical miracles since the apostolic age. Can Mr. Newman have forgotten the solemn and emphatic language of St. Paul? "But though we, or an angel from heaven, preach any other Gospel unto you than that which we have preached unto you, let him be accursed." If there be those who have really committed this sin,—if there be any Church, which has brought in, or received the "new dispensation," assuredly such is the sentence recorded against her in the archives of heaven.

Proceeding to examine the *internal character* of the Ecclesiastical miracles, we find the whole of them, as a class, inferior to the Scripture miracles: some dissimilar in object; some directly contrary; and some having no assignable object whatever (p. 46.) Such a state of things is no doubt "painfully perplexing;" and, so far as we are aware, Mr. Newman is the first who has endeavoured to fling a bridge over this chaos—that is, to promulgate a *theory* which shall bring the whole into harmony and order. He is a grave man, and writes on grave subjects, and we cannot suspect him of any leaning towards the burlesque; nevertheless, his theory of Ecclesiastical miracles is nothing other than a caricature of the argument from analogy. It is Bishop Butler travestied. We present the substance of it to our readers in his own words:—

"To take for instance, the case of animal nature, let us consider the effect produced upon the mind on seeing, for the first time, the many tribes of the animal world, as we find them brought together for the purposes of science, or exhibition in our own country. We are accustomed, indeed, to see wild beasts more or less, from our youth, or at least to read of them; but even with this partial preparation, many persons will be moved in a very singular way on going for the first time, or after some interval, to a menagerie."—P. 47.

"First, the endless number of wild animals, their independence of man, and uselessness to him; then their exhaustless variety; then their strangeness in shape, colour, size, motions, and countenance; not to enlarge on the still more mysterious phenomena of their natural propensities and passions; all these things throng upon us, and are in danger of overpowering us, tempting us to view the Physical Cause of all as disconnected from the Moral, and that, from the impression borne in upon us, that nothing we see in this vast assemblage is *religious*, in our sense of the word religious. We see full evidence there of an Author—of power, wisdom, goodness; but not of a Principle or Agent correlative to our idea of religion. But without pushing this remark to an extreme point, or dwelling on it further than our present purpose requires, let two qualities of the works of nature be observed before leaving the subject, which (whatever explanation is to be given of them, and certainly some explanation is not beyond even our limited powers) are at first sight very perplexing. One is that principle of *deformity*, whether hideousness or mere homeliness, which exists in the animal world; and the other (if the word may be used with due soberness) is the *ludicrous*;—that is, judging of things, as we are here judging of them, by their impression upon our minds.

"It is obvious to apply what has been said to the case of the miracles of the Church, as compared with those in Scripture. Scripture is to us a garden of Eden, and its creations are beautiful as well as 'very good;' but when we pass from the Apostolic to the following ages, it is as if we left the choicest valleys of the earth, the quietest and most harmonious scenery, and the most cultivated soil, for the luxuriant wildernesses of Africa or Asia, the *natural home or kingdom*

of brute nature, uninfluenced by man. Or rather, it is a great injustice to the times of the Church, to represent the contrast as so vast a one; and Adam might much more justly have been startled at the various forms of life which were brought before him to be named, than we may presume at once to decide that certain alleged miracles in the Church are not really such, because they are unlike those to which our eyes have been accustomed in Scripture. There is far greater difference between the appearance of a horse or an eagle, and a monkey, or a lion and a mouse, as they meet our eye, than between the most august of the Divine manifestations in Scripture, and the meanest and most fanciful of those legends which we are accustomed without further examination to cast aside."—Pp. 48, 49.

It must be acknowledged that Mr. Newman's vein is not happy, in striving to do honour to the miracles of Rome and the early ages. He allows that many of them were false, and many of doubtful authority; and those which are, or may be true, he characterizes as rude and brutelike in nature, uncouth, aimless, ludicrous, or deformed. Reserving the question of the truth or falsehood of the miracles, the epithets, by which he describes them, are at once apposite, and admirably chosen. A Tractarian theory is the very counterpart of the legendary labyrinth: those who lose themselves perish; and for all that enter, the only possible fortunate issue is to return, after much waste of time and labour, to the place from which they set out at first; and Mr. Newman is true to his school.

"An inquirer, then," says he, p. 104, "should not enter upon the subject of the miracles reported or alleged in ecclesiastical history, without being prepared for *fiction and exaggeration* in the narrative, to an *indefinite extent*. This cannot be insisted on too often: nothing but the gift of inspiration could have hindered it. Nay, he must not expect that more than a few can be exhibited with evidence of so cogent and complete a character as to demand his acceptance."

Yet why should not an honest man be able to tell the truth, although he laid no claim to inspiration? If the Fathers were holy and honest men, they may reasonably be expected to narrate facts, which they profess in many cases to have seen with their own eyes, without any very considerable amount of lying. Here however, and here only, in Mr. Newman's opinion, the Scripture appears to have a considerable advantage: for it is an authentic document; while the Church unfortunately has never catalogued her miracles, and hence, such of them as are known to be true, afford only an indefinite presumption in favour of the others.

The next step is to prove, as well as he can, (pp. 106-109,) that Leslie's tests can only be applied to a very few of the Mosaic miracles, and not at all to those of the New Testament; that Paley proves but the bare fact of the Resurrection; that

Lyttleton, Douglas, and others, fail in most instances, in making out their case, and that Douglas especially (p. 109) leads us to infer, that the whole of the New Testament miracles lie under the suspicion of falsehood. Nay, as there are men who object to the Ecclesiastical Miracles as fanciful, trifling, extravagant, or evidently false, he meets such arguments thus :—

“As they are used to serve the purpose of those who would disparage saints, it is necessary to show that they can be turned by unbelievers as plausibly, but as sophistically, against apostles.”—P. 90.

We will not outrage the feelings, and insult the good sense of our readers, by following Mr. Newman in this disgraceful attempt. The Tractarians teach that the Canon and the Creed, the Bible and the doctrines of Christianity, have no other proof, no other foundation, than the voice of the fourth and fifth centuries; “they know no other, they require no other.” They teach that, “If the Fathers contradict each other in words, so do passages of Scripture contradict each other,” (*Tract* 85, p. 80); that a certain miracle of our Lord’s would, if met with any where else, be spoken of “as an evident fiction,” (p. 92); that His interpretation of “I am the God of Abraham,” would “startle and offend reasoning men,” (p. 110); that were we not *used* to read many of the Scripture narratives, we should scoff at them, (p. 88); that the prophets gathered certain of their doctrines from Babylon, others from the heathen; and that, if we reject the authority of the Fathers, because we find contradictions, absurdities, and falsehoods in their writings, (as is most undeniably the case,) we are bound, on the very same grounds, to reject the authority of the Scriptures. In like manner is continued for 115 pages, a deliberate, laborious, and systematic attempt to undermine and depreciate the inspired Word of God, to barb the arrows of the infidel, to collect every accusation, to insinuate every topic, which tends to shake our confidence in Scripture; and all this for what? merely that men may be driven elsewhere for a system which is not to be found in it. Nor is the attempt made in ignorance of its dangerous and mischievous nature; for it is distinctly and emphatically announced, at the commencement of *Tract* 85, as “a kill or cure remedy.”

It may reasonably be asked, were it possible to drag down Scripture to the level of the Fathers, and to show that it contained contradictions, errors, and untruths,—where would be the gain to the Tractarians? Their answer is, that if we have faith in the Church, though our religion were “as unsafe as the sea,” yet He “who could make St. Peter walk the waves, could make even a corrupt or defective Creed, truth to us.”—*Tract* 85, p. 85. Not now for the first time has Christ been “wounded in the house of his friends.” When the Priests and Pharisees of old,

in spite of Levitical succession, and ascetism, and traditional lore, saw fishermen and peasants chosen and approved as ministers of the gospel, and publicans and sinners pressing into the kingdom of God before them, they hated and spoke against the teaching of Jesus ever the more bitterly, as it went forth, with increasing clearness, the opposite and the antagonist of their own.

But leaving these men, and their unhappy and chaotic theories, where falsehood cannot be separated from truth, and superstition and infidelity struggle for the mastery, there remains still, in all its perplexity, the unresolved problem of Ecclesiastical Miracles. As a preliminary to further inquiry, we unhesitatingly reject from the list every miracle said to have been wrought by pretended saints, heretics, or demons, and every narrative found in anonymous, obscure, or apocryphal works; in short, all which the Church of Rome scruples or declines to receive. Still further, we shall consider only such miracles as are vouched for by the very chief of the Fathers in acknowledged genuine treatises, or by the authority of a General Council, or by the authentic acts of saints canonized by the Church of Rome, and inserted in her Breviary. Few perhaps are aware of the extreme severity of the Romish ordeal. The following account of it is taken from "Milner's End of Controversy," p. 253, as published at Derby in 1843.

"In the first place, then, a juridical examination of each reported miracle must be made in the place where it is said to have happened, and the depositions of the several witnesses must be given upon oath; this examination is generally repeated two or three different times at intervals. In the next place, the examiners at Rome are unquestionably men of character, talents, and learning, who, nevertheless, are not permitted to pronounce upon any cure or other effect in nature, till they have received a regular report of physicians and naturalists upon it. So far from being precipitate, it employs them whole years to come to a decision on a few cases, respecting each saint; this is printed and handed about among indifferent persons, previously to its being laid before the Pope. In short, so strict is the examination, that, according to an Italian proverb, *It is next to a miracle to get a miracle proved at Rome.* It is reported, by F. Daubenton, that an English Protestant gentleman, meeting, in that city, with a printed process of forty miracles, which had been laid before the Congregation of Rites, to which the examination of them belonged, was so well satisfied with the respective proofs of them, as to express a wish that Rome would never allow of any miracles but such as were as strongly proved as these appeared to be, when, to his great surprise, he was informed that every one of these had been rejected by Rome as not sufficiently proved!"—P. 253.

To these classes, no doubt, Mr. Newman refers, when he speaks of the miracles which are "known to be such," and which lend their sanction to innumerable others, made use of, but not

catalogued, in the Romish Church. That, then, which has for evidence whatever is wisest and holiest among the Fathers, or the authority of a General Council, or the searching scrutiny of the Congregation of Rites, sanctioned by the Breviary, with the "imprimatur" of the Council of Trent and the Popes, may safely be looked upon as an authentic specimen of an ecclesiastical miracle. "That Palladius," says Mr. Newman, "has put in writing a report of an hyena's asking pardon of a solitary for killing a sheep, and of a female turned by magic into a mare, will appear no reason, except to vexed and heated minds, for accusing the holy Ambrose of imposture, or the keen, practised, and experienced intellect of Augustine, of abject credulity."

We shall, therefore, in illustrating the nature of the ecclesiastical miracles, select, not from Palladius and Theodoret, or Vincentius Belluacensis and Jacobus de Voragine, but from Ambrose and Augustine, Jerome and Chrysostom, Gregory of Nyssa and Sulpicius Severus, Gregory the Great and St. Bernard, the Second Council of Nice, and the Breviary of the Church of Rome.

Remarkable it is that Romanists and Tractarians alike content themselves with tracing upwards their distinguishing doctrines, and their distinguishing miracles, not to the Apostolic age, but to the church of Ambrose and Augustine, of Chrysostom and Athanasius. Then, indeed, she had princely bishops, and magnificent basilics, and gold and silver vessels, and precious shrines, and gorgeous ceremonies, and the power and the will to trample her enemies under her feet. Her prelates held their own with emperors; the deserts of Egypt swarmed with her monks; every shrine had its miracles; and her virgins were in the first freshness of their glory. Yet there appears to be no sufficient reason, why we should seek for the primitive type of Christianity in an age four hundred years distant from the time of its Founder. About four hundred years ago, Bedford and Talbot were warring with La Hire and Dunois, and Joan of Arc was judicially murdered by the sentence of a French bishop, confirmed by the University of Paris, at the command of the English. Four hundred years ago, Constantinople was a Christian capital, the Cape of Good Hope was not discovered, and the Council of Basle was propounding to the Church the immaculate conception of the Virgin. Four hundred years ago, a Roman Catholic Archbishop of Canterbury denounced the translation of the Bible as "pernicious," and the Roman Catholic Church of England was engaged in condemning the Lollards. Little enough do we know of the spirit or religion of the men of England in those days, when the war of the Roses was preparing. But if we interpose four hundred years of greater darkness, as were the first four centuries of the Christian era, when printing was unknown, and civil wars,

continual revolutions, and barbarian swarms swept away almost every trace of literature, how is it possible, not to prove, but even to suppose, that the Church of Christ and his Apostles could be identical, or alike with the Church of Ambrose and Chrysostom?

Nevertheless, though the Patristic Church did, in verity, so differ from the Apostolic, as to form, in Mr. Newman's estimation, "a new dispensation," there is, on that account, but the more reason to listen patiently to the miracles which she has to allege. Waiving all abstract arguments, it is her right to require credence for every miracle which she can satisfactorily substantiate; while on the other hand, if she fails in proving the miracles, the doctrines or practices which she founds on them cannot be sustained. Failure may even have more serious consequences: for, "lying miracles" and "doctrines of demons," that is, of dead men, are distinguishing marks of the great apostacy.

Theodorus, afterwards called Gregory, and surnamed "the Wonder Worker," was bishop of Neo Cæsarea, in Pontus, towards the middle of the third century. His life has been written by Gregory of Nyssa, who was the brother of Basil the Great, and whose reputation for learning and virtue gained for him the title of Father of the Fathers. His record of the miracles of his namesake is corroborated by Basil and Jerome, is received as authentic by Mr. Newman, and is to be found in Alban Butler's *Lives of the Saints*, which was republished by authority, in 1836, as "an Historical Supplement to the Old and New Testaments."

Gregory Thaumaturgus wrought many wonderful works, and he has left behind two very wonderful writings, both of which deserve notice. The first is very short indeed: it is a letter to the devil. The second is not very long: it is a creed, which was dictated to him by the Apostle John and the Virgin Mary. The history of the first is gravely narrated by the Nyssene bishop, and as gravely repeated by Mr. Newman. We translate, slightly abridging, from the Paris edition of 1638.

"As Gregory was returning from his solitude to the city, being overtaken by evening, and a heavy shower of rain, he entered with his attendants into a certain temple. Now, this temple was famous, because in it there was a familiar intercourse between the demons who were worshipped and the attendant priests, oracular responses being uttered by them. As soon as he had entered the temple with his followers, immediately he frightened away the demons by the invocation of the name of Christ; and having purified, by the sign of the cross, the air polluted with the fumes of sacrifices, he spent the whole night, as was his wont, sleepless, and engaged in prayer and the singing of hymns. Early in the morning he proceeded on his journey. But when the priest was offering the customary morning worship to the demons, it is reported, that the demons appearing to him, said that the place was inaccessible to them, on account of him who had remained in it during the night. The priest, therefore, (*after fruitless endeavours to*

induce them to return,) full of rage and fury, hastening after that great one, as soon as he overtook him, broke out into the fiercest threats, of denouncing him to the magistrates, of laying violent hands upon him, of complaining to the emperor, that he, a Christian and an enemy to the gods, had dared to enter into their temples, so that miraculous power was no longer put forth there, nor oracles emitted. But Gregory (undismayed) answered, that he had such confidence in Him who fought for him, that he was able to drive out the demons, or to bring them in again, wherever and whenever it pleased him. (The priest, amazed, asked him for a proof.) Whereupon that great one, tearing off a small fragment from a book, and writing upon it his command to the demons, gave it to the priest: now, these were the words of the letter,—GREGORY TO SATAN, ENTER! And the priest having laid this letter on the altar, on performing the customary rites, again saw what he had been accustomed to see, ere the demons had been driven from their temple.”—*Greg. Nyss. Opera.* tom. iii., pp. 548, 549.

From this miracle it appears to follow, that, in the eyes of the Fathers and of the Church of Rome, there is nothing iniquitous, or unworthy of a Christian bishop, in restoring devil worship, and giving power to Satan by oracles, and miracles, to lead captive and destroy human souls. It may be urged in extenuation, that the priest was afterwards converted. Unfortunately, however, this did not take place, until the bishop, at the priest's request, had made a huge rock move from one place to another, as if it had been “a living creature.” Then the priest acknowledged the incarnation of Christ, and was baptized, (P. 550.)

The second production is not less remarkable. On a very dark night, as Gregory lay awake in great distress of mind about a sermon which he had to preach on the Trinity, he was suddenly aware of a venerable old man, who stood by his bedside. His mysterious visitor pointed with his fingers in a certain direction, and Gregory, involuntarily glancing thitherwards, beheld a third party added to their conference. It was a woman of more than human aspect and majesty. Light was diffused around them, brighter than the splendour of a torch. Nor was Gregory left in doubt as to the names of his celestial visitors. For the woman, addressing John by name, requested him to explain the mystery to the youth before them: and John answered, “that he was prepared in this matter to gratify the mother of the Lord.” As soon as the Apostle had ended his explanation, the two vanished; and Gregory, immediately committing it to writing, has bequeathed this divinely inspired (*divinitus datam*) document to posterity. We subjoin a literal translation.

“One God the Father of the living Word, of subsisting essential wisdom and power, and of figure, or likeness (*ὑπακρίτης*) eternal; perfect, the begetter of the perfect; Father of the only begotten

Son. One Lord, *solus ex solo*, God of God; the express form and image of the Godhead, the efficacious Word, the Wisdom comprehensive of the constitution of all things, and the Power which formed the whole creation; the true Son of the true Father; invisible of the invisible; incorruptible of the incorruptible; immortal of the immortal; and eternal of the eternal. And one Holy Spirit, having existence from God; who has been made manifest through the Son, namely to men; the image of the Son, perfect of the perfect; Life, the cause (of life) to the living; the holy fountain, Holiness; the Leader (or Minister) of sanctification; by whom is manifested God the Father, who is over all things, and in all things, and God the Son, who is through (permeates) all things; a perfect Trinity, in glory, eternity, and dominion, neither divided, nor differing (alienated) from each other."—P. 546.

Now, says Nyssen, may we not justly compare this with the tables of the law given to Moses. "Instead of the sensible Sinai, there was the height of desire for the truth; instead of the darkness that covered the mountain, there was a vision unseen by others; instead of tables of stone, a human mind; instead of writing, the voice of his visitors." (P. 547.) The balance here appearing to decline decidedly against Moses, the considerate bishop is willing to afford him another chance. Accordingly, he relates a story of two brothers disputing concerning their respective rights to a certain lake. Gregory decided the dispute by drying it up. Now, Moses divided the Red Sea, and Joshua, the river Jordan; but, as Nyssen observes, they merely parted the waters while the host was passing, whereas Gregory dried the lake up altogether. So much for the greatness of the miracle; and, if the wisdom of the decision be considered, the celebrated judgment of Solomon, in the matter of the contending mothers, cannot for a moment be compared with it. Pp. 555, 557. Add to these, that, during a remarkable inundation of the river Lycus, he stuck his stick into the ground, at a point from which the river retired, and never rose so far again for a hundred years, and the stick became a tree: which, (Mr. Newman writes, p. 130,) "some may think approaches to fulfil Leslie's celebrated criterion of a miracle."* Again, when a courtesan publicly asked him for money, which she said he had promised her, he paid her the

* The following twin ecclesiastical miracle is consistent with our personal knowledge. After the melting of the snow on the Himalaya range, many of the Indian rivers rise with alarming rapidity, and subside as rapidly. Not many years ago, one of the feeders of the Ganges threatened to overtop its dams, and injure the surrounding crops. A Roman Catholic priest hastened to the point where the danger was greatest, and laid down a consecrated medal in order to stop the flood: but the waters covered it. He then lifted the medal, and placed it somewhat further back, and with the same result: but, on the third trial, he appeared to be successful; for the river rose no higher. Now, this very natural occurrence he always looked upon as a miracle. And why should it not be as good a miracle as Gregory's!

money, but the devil immediately entered into her. Finally, when a Jew pretended to be dead, and his companion asked for something to bury him in, Gregory threw his cloak over the supposed dead man, upon removing which, he was found to be dead indeed; and now, the catalogue of nearly all the miracles particularly detailed by Nyssen is complete. On turning to the *Romish Breviary*, it will be found that these miracles of Gregory *Thaumaturgus* form the subject of the 4th, 5th, 7th, and 8th lessons for the 17th day of November; the drying up of the lake, the staff on the banks of the Lycus, the removal of a rock, the driving demons from the temple, being all particularly mentioned, and the others included in a general affirmation of the many miracles which he performed. Such as it is, the narrative was gathered from tradition alone, was written one hundred and twenty years after the events, and need not detain us from passing on to the two following centuries.

The fourth and fifth centuries were emphatically the age of ecclesiastical miracles and "inventions." Irenæus, indeed, makes mention of the "gift of tongues," and of men raised from the dead in his time: but his adoption, in all its absurdity, of the legendary gossip of Papias, and the absence of all details as to name, date, and place, prove nothing but his own credulity. Cyprian was no miracle-monger; and the few which he ventures to repeat, concerning the consecrated bread turned into cinders, and such like, are best left in obscurity. It is far otherwise when we come to men, who have ever been looked on as the lights of the Church, and who report what they profess to have seen with their own eyes. Supposing that these eminent men wrote in good faith and with due caution, much will be found in these narratives which cannot now be considered as miraculous. The shrine of a popular Christian saint and the temple of a popular heathen god resembled each other so closely, as inevitably to suggest certain suspicions as to the family likeness of their interior working. Each had its holy salted water, its altar at the east end, its sanctuary for criminals, its multitude of worshippers, its treasure-room stored with gorgeous robes, embroidered veils, candelabra, chalices, and vases of gold, silver, or brass, and ornaments often sparkling with gems. During the day, the sick pressed in to be healed; during the night, crowds slept in the porches, waiting to be informed, by dream or vision, of their stray cattle, or lost spoons, or whatever else lay nearest their hearts for the moment. Each, too, had its golden models of arms and legs, of feet and eyes, its pictures of remarkable escapes, and its numerous scrolls, with duly attested cases of miraculous cures, and prodigies, all effected by the interposition of the presiding genius. So far the balance of evidence stands even between the heathen Esculapius of *Egæ*, and the Christian Theodorus of Pontus. With the help of

Salverte and Baptista Porta, and the Hindu jugglers, one of whose feats was to sit unsupported in the air, and with the pipes and wires of an Isis in Pompeii, or an image of Our Lady in an English monastery as they lie in the page of history before us, much can be accounted for, even should the blood of St. Januarius melt in vain for four hundred years,* or St. Francis raise himself in the air to rebuke our incredulity. The greater portion, however, belong to the class of "tentative miracles" or cures, more or less complete, and accompanied by numerous failures. The ordinary average of escapes from war and shipwreck, and recoveries from disease, with the astonishing influence of the mind upon the body, as shown in the effects produced by Mesmer, or at the tomb of the Abbé Paris, must often, as Mr. Newman allows, have been honestly mistaken for miracles. Yet all this is but slightly applicable to the ecclesiastical miracles, which form the staple of the narratives of the fourth and fifth century Fathers, and in the main, leaves them all but untouched. Miraculous power had then passed from the living to the relics of the dead. A bone, a rag, a chip of wood, a filing of rusty iron, or a fragment of corrupted blood formed into paste, wrought wonders far beyond apostolic example. A little virtue still lingered in the living; but it was confined to the exorcists, and a few of the hermits, or monks in the desert. As a fair specimen of the latter, we offer one or two extracts from Jerome, the ablest, the most ingenious, and the most learned of the Latin Fathers. We translate from the Aldine edition of his works, published at Rome in 1676. He is narrating the journey of the great Antony, now ninety years old, to visit the hermit Paul, who was in his one hundred and thirteenth year:—

"He beheld a creature, half man and half horse, which the poets have termed a Hippo-centaur. On seeing it, he arms his forehead with the sign of the Cross, and says, 'Ho, thou! in what part here does the servant of God dwell?' But the other, grinding forth some barbarous sounds, and breaking, rather than uttering, words, moved by the terrified countenance of the old man, sought for a gentler mode of intercourse, and, stretching forth its right arm, indicates the desired path; then, rushing over the fields, swift as the flight of a bird, vanished from his wondering eyes. But, whether the devil assumed this appearance to frighten him, or whether the desert, as usual, fertile in monsters, produces such a beast, we hold to be uncertain. Antony, therefore, lost in astonishment, and reflecting within himself on what he had seen, goes forward; immediately he sees within a rocky valley a little mannikin, with a forehead roughened with horns, and with the feet of a goat. Undismayed by this sight, Antony laid hold on the shield of faith, and the breastplate of hope, like a tried warrior: nevertheless the creature of whom we have

* This disgraceful juggle was first introduced about A.D. 1450.

spoken, offered him some dates for his refreshment, as if as hostages for peace. Whereupon Antony stopped, and asking what it was, received this answer: 'I am mortal, and one of the inhabitants of the desert, whom the heathens, deluded by various errors, worship, calling us Fauns, Satyrs, and Incubi. I come now as an ambassador from my race. We beseech you to pray to our common God for us, whom we know to have come for the salvation of the world, and whose sound has gone forth throughout all the earth.'—*Hieronymi Opera*, tom. i. p. 158.

The remainder of the life of Paul contains an account of his interview with Antony, his death, the arrival of two lions, who wept over him, dug his grave, asked and received the blessing of Antony, and went away. Another short extract from Jerome's life of Hilarion will surely be sufficient:—

"Hilarion angry with himself, (on account of certain carnal thoughts,) and striking his breast, as if he could drive out thoughts by striking with his hands, says (to his body), 'Ho, ho, you little donkey, I shall keep you from kicking; (*Ego, aselle, faciam, ut non calcitres*;) you shall have straw instead of barley: I shall vex you with thirst and hunger: I shall load you with heavy burdens; and, through scorching heat and freezing cold, I shall strive to make you think rather of food than of wantonness.'—Once upon a time he was praying with his head on the ground, and, as is natural to man, his mind, wandering from his prayer, thought of something else: instantly the ready rider leaped upon his back, and kicking his sides with his heels, and lashing his back with a scourge, calls out, 'Holla, why are you sleeping?' Then, grinning over him, when he was tired, asked if he would take a little barley. (*Cachinansque desuper, cum defecisset, an hordeum vellet accipere, sciscitabatur.*)"—Tom. i. p. 556-57.

This holy hermit built a hut for himself, four feet wide, five feet high, and a little more than his own length. He lived chiefly on herbs, and raw roots; he lay on the ground, and for clothing, he wore only a piece of sacking, which he never changed or washed, till it dropped off in pieces, saying it was superfluous to look for niceness in sackcloth. Mr. Newman assures us, (p. 32,) that ten months after his death, his body was found entire, and sent forth a most exquisite fragrance! The life of Antony by Athanasius is stuffed with similar stories, and can scarcely be called traditional; for though Paul and Antony more properly belong to the third century, the latter was personally known to Athanasius. He who can believe that to live like a beast in the desert is to fulfil his duty to God and his fellow-men, may perhaps believe these miracles; scripturally and rationally, though affirmed by a thousand Jeromes, from their very nature, to believe them is impossible. The miracles of Paul, including the digging of his grave by the lions, are attested by the Breviary on Ja-

nuary 15th; Antony's on January 17th; and Hilarion's on the 21st of October.

Omitting, as extraneous, all abstract speculations as to the nature of exorcism and possession, there remains a very plain and practical way of dealing with the subject. We have to deal with it, simply as we find it in the fourth century, when the exorcist, with his Energumeni, held the same relation to relic-finding, that the assayer holds to the gold in the mint.

Feelings of the deepest sorrow and despondency must arise in every right-thinking mind, when directed to the history of relics, or more properly the worship of dead men. Beginning in that instinctive and touching affection with which man treasures every memorial of the loved and valued whom he can see no more, it sprung up at once, in those semi-pagan times, into a formidable system of shameless imposture and grovelling superstition,—the bane and curse of Christendom, from Ambrose of Milan down to Arnoldi of Treves. A spike from the crown of thorns, a drop of the virgin's milk, the paring of a nail, a nameless rag, an unknown bone, things vile, contemptible, and rotten, have been venerated in civilized Europe for nearly two thousand years. Ambrose, Gregory, and Bernard, Fénelon and Bossuet, Bellarmine and Borromeo, have seen with acquiescence the Saviour practically dethroned for things like these, and the millions of Rome, age after age, kneeling at the shrines of men and women, with names often the offspring of accident or invention. Yet Mr. Newman, with these facts before him, which it is impossible either to extenuate or to deny, dares to talk of the charging home this self-evident connivance in imposture upon the Fathers and Doctors of the Church, as "an impiety too daring, too frightful, too provocative of even an immediate judgment, for any but the most callous hearts and the most reckless consciences to conceive."—(P. 109.)

Let it be remembered, that in the fourth and fifth centuries the most extravagant value was attached to relics, and that they were generally believed to be possessed of inestimable virtues. Relics cured the sick, raised the dead, drove back the barbarians, confounded the Arians, and obtained the pardon of sin. The Emperor Constantine fortified Nisibis with the relics of St. James; the relics of Theodorus repulsed the Scythians; and Leo and Philippicus sought to borrow from Antioch the remains of Simeon of the Pillar. Relics obtained for the fortunate discoverer fame, honour, advancement, and MONEY! The gifts offered at a popular shrine were truly astonishing. Constantine endowed a single baptistry in one of the Roman churches with a yearly income of more than £10,000 (which must be multiplied considerably to find its value in our days); and plate, precious stones, and other valuables were accumulated in the churches in profusion.

The whole was at the uncontrolled disposal of the bishop, who rendered no account, and used it in any way he saw fit. Hence, relics flourished; more and more were ever and anon discovered; and the Sarabaites (a class of vagabond monks) gained a profitable livelihood by hawking them about. St. Augustine, in his treatise on the duties of monks, upbraids them sharply for this very practice, or, as he expresses it, for "carrying relics about (if they be relics) and making advantage thereby." The 'if' here is sufficiently significant.

The "invention" of relics was a process so uniform in all its details, that an account of any one may serve for the whole in a body. An obscure priest, in an obscure village—Lucian, for instance, of Caphargamala, a small place near Jerusalem—has a dream, or vision, or revelation; during which Gamaliel, the teacher of St. Paul, appears to him, in a white robe edged with gold plates, and covered with crosses. Gamaliel tells him where to find his grave; in which lay also Nicodemus, Stephen the Protomartyr, and Abibas, the son of Gamaliel. He appears again with four emblematic baskets: two with white roses, for Nicodemus and himself; one with red roses, for Stephen; and one with saffron, for Abibas. Lucian tells his bishop. Bishop John of Jerusalem is overjoyed. They dig, but in vain; until Gamaliel gives the monk Migetius better directions, and four coffins are found. They were proved by the Energumeni, and by seventy-three miraculous cures; and the mere sight of a little of the dust of St. Stephen, carried thither by Orosius, converted 540 Jews in Minorca. This story is attested, not only by Evodius, but by the great Augustine; and it was part of these very relics that wrought the miracles recorded in his "*City of God*."* To explain the part of the Energumeni in this exhibition, (for the evil spirits within them always made them roar, and threw them into convulsions when brought near the genuine relics of a martyr,) it is simply necessary to state that the Energumeni were paid, and employed in the menial work of the Church; and that the chief duty of the exorcist was to lay his hands upon them, and feed them every day! Such a state of things could not always continue. The bishops were obliged to take the work of exorcism into their own hands. And what was the result? The Energumeni ceased to be found.

How generally and how shamelessly the (well-named) invention of relics prevailed, may be judged of from the 14th canon of a Council held at Carthage, which is also the 50th canon of the African Council, and the 83d of the African Code. We

* For this invention, see August 3d in the Breviary. It has the honour of a service for itself.

translate literally from Harduins' edition of the "*Concilia Sacrosancta Labbei et Cossartii*," printed at Paris in 1715 :

"We also ordain that the altars, which, everywhere through the country, and by the way-sides, are set up as memorials of the martyrs, but in which no body or genuine relics of martyrs can be proved to be enshrined, be pulled down by the bishops who preside in such places, *if the thing can be done*. But if, through popular tumults, this may not be done, let the people be admonished not to frequent such altars, that those who are well disposed be not detained there by mere superstition. And never let any memorial of a martyr be accepted as *probable*, except there be a body, or some relics found, or a faithful tradition that such an one dwelt, or had possessions, or suffered there. For the altars which are *everywhere* set up, through dreams and inane so-called revelations of all sorts of men, are in every way to be reprehended."—*Acta Conciliorum*, tom. i., p. 907.

This instructive canon not only shows what sort of relics were "everywhere" to be found; but it also shows how very little was required to make relics "probable."

Of the countless ecclesiastical miracles belonging to this class, but one is put forward with pretension. It is the finding of the relics of Gervasius and Protasius (two names probably chosen for the rhyme) by St. Ambrose, the Bishop of Milan, and the accompanying restoration to sight of Severus, the butcher, who immediately afterwards was taken into the pay of the Church. The evidences of fraud brought forward in this case, in Mr. Taylor's "*Ancient Christianity*," are so conclusive, that we may be excused from further adverting to it. But, as it might seem harsh and uncharitable to bring so serious a charge against a name so illustrious, on the weight of a single incident, it is our painful duty to show, that the conduct of Ambrose at other times was, at the least, exceedingly questionable.

When elected by popular acclamation to the See of Milan, in order to prove the sincerity of his "*Nolo Episcopari*," he had recourse to the following expedients:—Being at that time Consular of Liguria, he ordered several of the criminals to be taken from prison, and to be publicly and cruelly tortured, that he might seem to the people to be of a merciless and unchristian disposition. But failing in this, he had women from the stews brought into his palace, where they remained all night.

The next startling fact is, that the new bishop-elect was not only totally unprepared, by previous study and training, for the ministry, but was yet unbaptized! Nevertheless, contrary to the so-called apostolical canons, contrary to the decisions of General Councils, contrary to all ecclesiastical order, he was first baptized, and, eight days after, consecrated bishop.

He commenced his spiritual labours (as he himself tells us) "by teaching what he had not yet learned," and he continued them by publishing, as his own, the works of others. He bor-

rows in the most bare-faced manner from Basil, especially in his Hexameron, and his Homilies on the Psalms: he borrows from Clement of Alexandria, borrows from Origen and Athanasius, borrows largely from Didymus; and Jerome declares that his book on the Spirit is a mere compilation; adding, with his usual biting satire, that he had made a wretched Latin book out of several good Greek books. It was, when dictating to Paulinus his exposition of the 43d Psalm, that the shield of fire, which so astonished that worthy secretary, covered his face, and entered into his mouth. One can scarce help smiling at the very strong probability, that he was then plagiarizing from Athanasius or Basil.

Though neither a cruel man nor a bigot, he took an active part in the persecution of Jovinian, who, for heresies, such as affirming that the married might be as good Christians as the single, that there was no extraordinary merit in fasting, that the Virgin Mary was not the gate of heaven, and that she and Joseph lived as man and wife after the birth of our Saviour, was condemned by Pope Siricius and Ambrose, handed over to the Emperor Honorius, cruelly scourged with thongs loaded with leaden bullets, and then banished to an island on the coast of Dalmatia. These, and other doings of a like character, somewhat forcibly suggest, that, notwithstanding the many eminent and commanding qualities of that remarkable man, his testimony can go but a very short way in favour of a miracle, which won him the victory over the Empress Justina and the Arians.

Such, indeed, was the general tone of the theological morality of the Fathers. They looked upon the falsehood and artifices of Jacob as commendable, being sanctified by the end.* They represent the contention between Peter and Paul, as not real, but got up between them for effect; and even the grosser crimes of the patriarchs, they receive, not as sins, but as mysteries. While others, more timid, indolently suffered, sanctioned, and countenanced miracles, which so well served their cause, it suited the bold and decided character of Ambrose, not to trust to subordinates, but in a matter of so much importance, to take the direction of the machinery into his own hands. It is true, (*valeat quantum*) that the Fathers were, for the most part, persuaded that their cause was the cause of God; but not one jot or tittle does this add to the argument for the ecclesiastical miracles.

In spite of so much that is suspicious or impossible, it may seem a bold thing to assert, as we do most unhesitatingly, that not even one ecclesiastical miracle of any kind or degree was truly wrought

* "Even Chrysostom," says Neander, "defends the principle, that a falsehood or deception is permitted for a good object."—*Life of Chrysostom*, vol. I., p. 22.

in the fourth and fifth centuries. But what is more, this can be proved by contemporaneous authority, the most express and unexceptionable. No one can doubt, that of all the Fathers, Chrysostom in the east, and Augustine in the west, hold the undisputed principality. Jerome had more learning, and Ambrose more political influence; Origen's vein was more novel and ingenious; but the unanimous verdict of posterity has awarded to Augustine and Chrysostom the palm of wisdom, soundness in the faith, eloquence, usefulness, and devotion. In Chrysostom especially, rare and apparently contradictory excellences were combined. For, while his popular discourses glow with the fervid genius of the east and the rhetorical splendour of oratory, his commentaries are remarkable for strength and sobriety of intellect, classic simplicity of style, and a sustained tone of practical scriptural Christianity.

This truly great and amiable man, though unhappily not without reproach in the matter of relics, has borne testimony, not once, but repeatedly, and at great length, to the fact that no miracles were performed in his time, and that none were reasonably to be expected.

Thus, in his "Treatises on Contrition" (as quoted in his life by Neander, vol. i., p. 64, of the English translation,) blaming the Christians of his own days for being so inferior to Peter, and Paul, and John, he writes—

"But ye say, these men were largely endowed with the divine grace. That excuse might avail, were it required of us to raise the dead, to open the eyes of the blind, to cleanse the lepers, to make the lame walk, to cast out devils, and to heal other similar diseases by miracles. Therefore, that this gift of grace no longer is bestowed on man," &c.

Again, in his Homily on the 12th chapter of Matthew's Gospel—

"But in these present times we no longer stand in need of sensible manifestations, faith sufficing to us in the place of all things, for signs are not for believers, but for unbelievers."—*Neander*, p. 358.

Again :

"How long shall we make the absence of miracles in our days an excuse for indifference?"—*Ibid.* p. 358.

Again, in his Homily on the 24th chapter of John's Gospel—

"To require signs of the Lord, is now, as in former days, to tempt him; for even at this present time there are those who seek for miracles, and say, 'wherefore are these signs no longer?'"—*Ibid.* p. 361.

Finally, for it is obviously useless to multiply quotations, he ends an argument for their discontinuance thus, "for this reason, miracles are not done now."—*Library of the Fathers.* Oxford, iv. 71.

The testimony of Augustine is not less explicit—

“The sick were healed, the lepers cleansed, the lame were made to walk, the blind to see, and the deaf to hear. The men of that age (the Apostolic,) saw water turned into wine, five thousand satisfied with five loaves, the sea walked on, and the dead rising again. Why, sayest thou, are not these things done now? Because they could not influence, unless they were miraculous; but if they became ordinary, they would no longer be miraculous.”—*August. de Utilitate Credendi*, tom. viii. p. 68.

It is not less strange than true, that Augustine afterwards draws back from his own admission. In his celebrated *Retractations*, referring to this very passage, he writes—

“In another place I have said, ‘why, sayest thou, are not these things done now?’ And I have answered, ‘because they could not influence,’ &c. But I said this, because neither so great, nor all these miracles are done now, not because none are done even in our days.”—*Retract.*, lib. i., cap. xiv. 5.

And again, in his *City of God*—

“And for miracles, there are some wrought yet, partly by the Sacrament, partly by the memories (oratories) and prayers of the saints, but they are not so famous, nor so glorious, as the others.”—*Ib.* lib. xxii. cap. 8.

This new position, therefore, can only consist with the former, (if their consistency be a thing possible at all,) by supposing with St. Augustine and Mr. Newman, that the ecclesiastical miracles were few, inferior, and comparatively scarcely worthy of notice. But alas, for this supposition! Mr. Newman himself mercilessly cuts it down. “The question,” says he, (p. 55) “has hitherto been argued on the admission, that a distinct line can be drawn in point of character and circumstances, between the miracles of Scripture and of Church History, but this is by no means the case!” If we turn to St. Augustine himself, we find recorded, in the 8th chapter of the 22d Book of his *City of God*, no less than five instances of individuals raised from the dead within his own knowledge, by cloths that had touched the shrines of the martyrs, and a little oil from the lamp of the “Caphargamala” St. Stephen’s shrine. Without inflicting on our readers the details of miraculous cures, of devils cast out, of the paralytic made to walk, which may be read to satiety in the chapter cited, it is sufficient to state that in his own town of Hippo, at the shrine of St. Stephen alone, seventy miracles were recorded, each in its own roll, besides others known to him, but not committed to writing. Calama furnished a far greater number; and Uzales, near Utica, very many; all within the space of two years—all

by the marvellous energy of the relics of Stephen alone, now parted from his three brethren of Caphargamala.

Now, 150 miracles at least, including resurrections from the dead, vouched for by Augustine and recorded in public monuments, as the yearly quota of three obscure African towns, with a corresponding allowance for all the shrines throughout the whole eastern and western empires, and for the equally prolific energy of the Thaumaturgist monks, exorcists and hermits, form a cluster, a very galaxy of miracles, unparalleled in lustre and magnitude, which no man could pass over, and to which no eye could be blind. Shall we believe, then, the Fathers asserting, or the very same Fathers denying? Shall we accept, on the same identical authority, miracles by the million, or not one at all?

The solution of this riddle seems to be, that the wiser and honestest of the Fathers believed in many of the ecclesiastical miracles, as they believed in the miracles of the Arians and the Heathens, and as men in later times believed in witchcraft; but that, knowing well how largely fraud and superstition mingled in them as a class, they feared to lay weight on them, or to claim for them any intrinsic authority, though willing enough to take advantage of them for ecclesiastical purposes. Else how could men, who argue with so much force and clearness for the truth and the consequences of the apostolic miracles, fail to plead as strongly for their own? It is no doubt true, that this solution, the most favourable that seems possible for his reputation, exposes "the keen and practised intellect of Augustine," to the charge of "abject credulity." This formidable charge, however, it is but too easy to substantiate. He not only believed in the disgraceful forgery of the Sibylline acrostic and prophecies, but he believed the Sibyl to have been a Christian by anticipation. He believed in the invention of St. Stephen's relics, in the invention of the Holy Cross and the *three* nails, of which one was lost, and the remaining *thirteen* are shown in the Church of Rome until this day! He believed, as may be seen in the chapter already quoted, in evil spirits, who maimed cattle, and wounded farm-servants, but were expelled by a little earth from the Holy Sepulchre; in others, in the shape of curly-headed negro boys, who stamped upon a poor man's toes to keep him from baptism, but never troubled him afterwards; and in another devil, who, being driven out by a relic of Gervasius and Protasius, pulled out the eye of the possessed, turning the black part white, and leaving it hanging by a little string; yet the eye was restored whole again. And, as quoted by Middleton, he narrates in the third volume of his works, Pp. 819, 820, that the Apostle John was not dead, but sleeping in the grave at Ephesus; and that the earth, under which he lay, might be seen to heave up and down with his breathing!

These are painful and melancholy proofs, that in this world, sin, error, and imperfection will cleave to the wisest and holiest of Christian men.

We had marked many absurd but elegantly written legends in the *Life of St. Martin of Tours*, by Sulpicius Severus, a work exceedingly popular, and indeed a sort of manual in the earlier ages. But the following brief extract must suffice:—"I am shocked," says his friend to him, in his own dialogues, "to tell you what I have lately heard; but an unhappy man has asserted that you tell many lies in your book." Our own opinion coincides so entirely with that of the "unhappy man," that we shall pass it over without further notice. We pass over the miracles of Epiphanius, Paulinus, Theodoret, Palladius, and others of the Fathers. They are unnecessary for our purpose. For their own sakes, this motto should be written over their miraculous narratives—

"Non ragionam di loro, ma guarda e passa."

We have chosen the most distinguished and the most eminent of the Fathers. Rome can produce no such authorities in later years. She can ask for no more trustworthy witnesses. They stand with her, as they have ever stood, first in reputation, and first in weight and influence, of all Christian uninspired men. Is their testimony sufficient? The answer is easy. As evidence, it has not sufficient intrinsic weight to substantiate a common historical fact; on testimony so worthless and contradictory, no impartial jury would convict, no judge pass sentence. As the sole foundation for the truth of innumerable supernatural interpositions, designed to bring in, if not a new dispensation, doctrines new, strange, and hitherto alien to Christianity, it will not stand a moment's sifting. Of nearly all the witnesses by whom it is delivered, it is avowed by themselves that they thought it no sin to deceive for a good end, that is, in support of their own opinions. Of the narratives which it upholds, many are utterly incredible; many evidently false; all suspicious; not one proven. Passing on, therefore, in search of the true, to later times, we select him who, according to Alban Butler, "for his illustrious actions and extraordinary virtues, was surnamed St. Gregory the Great." He was elected Pope towards the end of the sixth century, and is favourably associated in the minds of Englishmen with the celebrated mission of St. Augustin to our shores. Combining the qualities of a pope and a saint, and being besides an eminent and illustrious historical character, we shall select copiously, and once for all, from the narratives which he has recorded. Whatever their nature may be, the Church of Rome is bound to them; for they present a fair and impartial average of

her ecclesiastical miracles; and there is no canonized Thaumaturgist, whose acts, after having been sifted by the Congregation of Rites, are a whit less improbable than those we now select, or a whit more strongly vouched for; while very many far exceed them in grossness and ludicrous absurdity. In quoting from his celebrated Dialogues, that manual of ecclesiastical miracles, we use the Basil edition of his works, published in 1551. We begin with the story of the lettuce:—

“ On a certain day, a female servant of God, from the same monastery of virgins, entered the garden, and seeing a lettuce, desired it; and, forgetting in her eagerness to consecrate it with the sign of the cross, greedily ate it up; but, being immediately possessed by the devil, she fell prostrate. And while she was tormented, a message was sent to Father Equitius with all speed, that he should come to her at once, and help her with his prayers. As soon as the Father entered the garden, the devil, who had taken possession of her, as if asking pardon, began to cry out of her mouth, ‘ What harm have I done? What harm have I done? I was sitting there on the lettuce, and the woman came and swallowed me up.’ (*Ego quid feci? Ego quid feci? Sedebam ibi super lactucam, venit illa et momordit me.*) To whom, with great indignation, the man of God gave orders that he should depart, and have no place in a servant of the omnipotent God; and the devil immediately departed.”—*Gregorii Magni Opera*, tom i. p. 1332.

This holy man seems indeed to have been of a hasty temper after his death, as well as when he was living; for a weary countryman happening one day to rest his burden on the saint's tomb, a whirlwind came down from heaven, and, leaving every thing else unmoved, snatched up the poor man's box and flung it to a great distance; thus warning all to use no liberty in such a presence. In the next page, we find Constantius of Ancona, like Narcissus before him, burning water instead of oil in the church lamps—a miracle which later saints seem not unfrequently to have plagiarized from them. The “ snow-tipped Soracte” has its fame in the classical pages of Virgil and Horace; but little did they anticipate the higher honours that awaited it. In process of time a monastery was built on its summit, and therein dwelt the illustrious Nonnosus. There was but one space of level ground near, very small, and almost blocked up by a large mass of rock. Now, it occurred to the venerable man during his cogitations, “ that this same place would make an excellent vegetable garden, provided the rock were removed; and it further occurred to him, that five hundred pairs of oxen could not so much as move it.” He therefore spent the night in solitary prayer, and next morning the brethren found the rock removed to a great distance, and abundance of room for planting

their cabbages. Another time—but Pope Gregory shall relate the story in his own words,—

“Another time, while the same venerable man was washing the glass lamps in the chapel, one of them fell from his hands, and was dashed into innumerable fragments. Dreading the vehement fury of the superior of the monastery, he presently gathered up all the broken pieces, laid them before the altar, and, with heavy groans, gave himself to prayer. As soon as he raised his head after his devotions, he found the lamp perfectly whole.”—i. p. 1338.

Both these miracles were attested by the venerable Bishop Maximian, and Laurio, an ancient monk; and the Pope and his friend Petrus received them with faith and amazement.

Benedict of Nursia was even more eminent in this department; for he not only raised a heavy stone on which the devil was sitting (p. 1361), and mended his nurse's sieve miraculously (p. 1351), but he ordered a glass jar filled with oil to be flung out of a window over a rock, and it was taken up without a chip broken off, or a drop of the oil being spilled, p. 1372. He also repaired a boy who had his bones so broken by the fall of a wall that he could only be carried in a sack, (*quem portare non nisi in sacco potuerunt*), and so quickly, too, that the boy was at his work again within the hour. It should be observed, however, that the devil had been jeering St. Benedict about this very accident (p. 1362), “*de cujus se interitu antiquus hostis Benedicto insultare credidisset.*”

The death of the Abbot Anastasius is remarkable, as calling forth almost the only gleam of romance, the sole spark of poetical imagination, that lights up the heavy pages of the Dialogues.

In the dead of night, a loud voice, like the prolonged sound of a trumpet, was heard from the top of the lofty rock that overhung the monastery, saying, “Anastasius, come!” Seven other names succeeded his. There was a pause; the night was silent; again the summons came; an eighth brother was called; and the voice was heard no more.

All the brethren who were summoned prepared for death; and all died—the eighth after a short interval, according to the warning. This was probably the germ of the legend in Marmion—the midnight summons from the Cross of Edinburgh to James and his nobles, ere they departed to the fatal field of Flodden. In Gregory we have the superstitious only, in Pitscottie the ecclesiastical miracle improved, or that inexplicable mingling of juggling, superstition, and worldly policy, by which the Romish Church governs, and is governed.

But the saints of the sixth century were not content with repairing broken glass, and providing seasoning for the soup of their brethren. Boniface, a Tuscan bishop and a great Thau-

maturgist, with the help of the Virgin Mary, gave large alms to the poor by an expedient, which, though sanctioned by a miracle, appears to be of very doubtful example.

Constantius, the grandson of this holy man, had sold his horse for about twelve pounds of our money, and had carefully locked up the gold in his chest. Soon after, certain poor men came to ask alms from the bishop.

"The man of God," says Gregory, "having nothing to give them, began to be in great distress of mind, lest the poor men should have to go away empty; when suddenly he remembered that his grandson, Constantius the presbyter, had sold the horse which he used to ride, and that the price was in his chest at that very moment. Thereupon, in the absence of his grandson, he went to the chest, and forcing open the lid with *pious* violence, he took away the twelve pieces of gold, and divided them among the poor people as he saw fit."

When Constantius returned, and found his chest broken open and his money gone, he made the most furious outcries, and shouted aloud to his grandfather, "Give me back my gold."

"The bishop," continues Gregory, "being troubled by his clamour, entered the church of the blessed Virgin Mary, and, with elevated hands and extended garments began to pray, standing, that *she* would give him something to appease the fury of the outrageous presbyter; and, upon turning his eyes to his garment, which was stretched out between his arms, suddenly he saw in the fold twelve pieces of gold, as bright as if they had come from the mint that very hour."—Tom i. p. 1842.

An Ultra-Protestant might question the morality of using such liberties with another man's property, and might even ask whether the miracle might not with advantage have preceded the robbery; but the heaviest burden of this wretched legend, is the damning evidence it affords that Gregory the Great, the leader of the Church and the first man of his age, saw nothing idolatrous in offering up direct prayer to the Virgin Mary.

On another occasion, Boniface, seeing his vegetables in danger from the caterpillars, adjured them in the name of Christ to depart; and forthwith they all crawled away, so that in an instant not a caterpillar or cankerworm was to be seen in the garden.

To a fox he was more severe. The mother of Boniface, being a good house-wife, was accustomed to rear poultry.

"Now, on a certain day while little Boniface was standing in the porch, a fox came and took away one of the hens. Instantly Boniface rushed into the church, and prostrating himself, cried with a loud voice, 'Is it thy pleasure, O, Lord! that I am not to eat any thing of my own mother's providing? Lo! here is a fox that devours the hens which she rears.' (Placet tibi, Domine, ut de nutrimentis matris mee manducare non possim? Ecce enim gallinas quas nutrit, vulpes

comedit.) Then rising from his prayers, he went out of the church. Almost immediately the fox came back, laid down the hen which it held in its mouth, and fell to the ground dying before his eyes."—P. 1344.*

Such were the virtues of a sixth century bishop; and woe to those who dared to doubt, or, even in the most questionable circumstances, to wish for an explanation of his conduct. Their doom may be easily anticipated from the following narrative:—Fortunatus, an Umbrian bishop, had driven a devil out of a possessed person; but the cunning fiend waited until it was evening, and then, assuming a human form, began to go about the town, crying with a lamentable voice, "Behold, what the holy Bishop Fortunatus has done; he has turned a stranger out of his house. I go about seeking for a resting-place, and I can find none in all his city." Now, a certain man was sitting by his own fire-side with his wife and his little son, and, hearing the stranger's lamentations, invited him to sit down by the fire, and to tell what the bishop had done to him. But while they were talking, the malignant spirit suddenly entering into the little boy, dashed him upon the embers, and the child immediately expired, p. 1345. Even the obsequious Peter, in the Dialogue, is considerably staggered by this catastrophe: but being assured by the Pope that the bereaved father well deserved his punishment, for trying to do better than his bishop, "*ut meliora quam episcopus fecisse videretur*," Peter assents, with an "*ita est, ut dicis*," "It is just as you say;" and Gregory goes on with his edifying narratives.

The far-famed Benedict, that "glorious patriarch of the monastic order," as Alban Butler calls him, died about the

* Two of St. Patrick's miracles deserve to be noted here, and, if Jocelyn of Furness vied in fame with Jerome and Gregory, St. Patrick should be first on our list; for he performed stranger and greater miracles than any we have recorded, having raised nineteen dead men at once, one of whom had lain ten years in the grave.

Now, the saint had a goat, who used to fetch water for him. This useful animal was stolen and eaten. The thief was apprehended, but, making oath that he was innocent, was likely to escape, when, lo! the goat bleated aloud *inside*. "And to the increase of this miracle," adds his faithful biographer, "it happened, that at the command, nay, rather by the sentence of the saint, all the posterity of this man were marked with the beard of a goat."—*Jocelyn's Life of St. Patrick*. Dublin, 1809, p. 165. On another occasion, St. Patrick was tempted to conceal certain pieces of swine's flesh to eat on a fast day. He was found out by an angel who had eyes behind, as well as before; but, on his repenting, another angel came, and telling him to put the pieces in water, they immediately became fishes. "But," continues Jocelyn, "many of the Irish, wrongfully understanding this miracle, are wont on St. Patrick's day, which always falls in the time of Lent, to plunge flesh-meats into water; when plunged in, to take out; when taken out, to dress; when dressed, to eat; and to call them, Fishes of St. Patrick."—(*ib. Swift's Translation*, Pp. 31, 32.) It is fair to add, that Jocelyn's Life of the Saint is of doubtful authority now.

middle of the sixth century, or, more precisely, in the year 543. Great in prophecy, greater in miracles, greatest for the rule which he established, he is compared at once to Moses and Elisha; and his order, with all its branches and affiliations, is reckoned to comprise thirty-seven thousand Houses. His miracles were related to Pope Gregory by four eye-witnesses, Constantine, Valentinian, Honoratus, and Simplicius, all holy and trustworthy men, all disciples of Benedict, and three of them his successors in the rule of his own monastery.

The first miracle which he performed was the reparation of the sieve. Immediately after, to avoid the praise of men, he fled to the mountains, and hid himself for three years in a small cave at the foot of a rock. His retreat was known to the monk Romanus alone, who fed him, from time to time, with a little bread let down by means of a long cord. As the visits of Romanus were irregular, he tied a bell to the cord, to apprise Benedict of his coming; but the devil, one day, observing it, "and envying the charity of the one, and the refreshment of the other, flung a stone at it, and broke the bell," p. 1351. "*Jactavit lapidem, et tintinabulum fregit.*" After he became an abbot, his monks determined to poison him, being grieved by the strictness of his rule; but he broke the vessel in which the poison was presented to him, by making the sign of the cross (p. 1354); and, when the attempt was repeated by means of poisoned bread, he made a crow fly away with it, p. 1358.

But all his miracles, (and they were manifold and most whimsical,) were totally unable to subdue either the guzzling, thieving, and vagabond habits of his own monks, or the inveterate though baffled malignity of his "ancient enemy."

Certain of the monks, going out on business, had embraced the opportunity of holding a carouse, but, when they returned, Benedict not only told them in what woman's house they had been feasting, but how many cups each had drunk. "*Nunquid tot calices non bibistis?*" p. 1362. Another time, one Exhilaratus, personally known to Gregory and Peter, having been ordered to carry two flasks of wine to the monastery, had hidden one by the way. Benedict received the wine without comment, but advised Exhilaratus, as he was going away, to look into the vessel which he had stolen, before he drank out of it. Accordingly, when he opened it, out crept a snake, p. 1366. Another of the brotherhood had hidden in his breast a parcel of napkins, which certain nuns sent to Benedict, and, of course, said nothing about them; but Benedict sternly upbraided him with the theft, and forced him to deliver them up, p. 1367. One more instance of the thoroughly "ecclesiastical miracle" we must quote.

There was a monk whom neither threats nor entreaties could induce to be present at prayers; invariably, as soon as the others assembled for prayer, out he went; and even Benedict himself had dealt with him in vain. At last the cause was discovered. Benedict "saw a little black imp pulling him out by the end of his garment." He asked Pompeianus and Maurus whether they also did not see the imp, but they answered, *No*. After two days spent in prayer, Maurus, however, succeeded; but Pompeianus could see nothing. The disease being discovered, the remedy was easy. On the very next occasion, as soon as the service was over, St. Benedict provided himself with a stick, and gave the offending monk a severe beating. "*Quem pro cæcitate cordis sui virga percussit; qui ex illo die nil persuasionis ulterius a nigro jam puerulo pertulit*," p. 1357, after which the little black boy never troubled him again. A younger monk was still more severely punished, for, going to visit his parents without waiting for the benediction of the abbot; as soon as he reached them he fell dead at their feet. Nay, even inanimate nature revolted against a crime so horrible, for, after he had been laid in the grave, twice did the earth cast him out of her bosom; and it was not until, by the directions of Benedict, a consecrated wafer had been laid upon the breast of the corpse, that the sepulchre consented to retain it, p. 1371. Now, says Pope Gregory, consider how great the merits of this saint must have been, when the earth cast forth the dead body of him who had not the favour of Benedict. "I consider," replies Peter, "and am stupid with astonishment." Amongst the other wonderful works of Benedict, it may, perhaps, be reckoned, that he provoked the devil to make a very miserable pun, which any one, who has sufficient curiosity, may find at p. 1361.

But even the glory of Benedict pales and dims when compared with the unexampled and unparalleled exploit of Datius, Bishop of Milan. This holy bishop, journeying to Constantinople, had taken shelter for the night in a haunted house, at Corinth.

"As soon as the man of God had retired to rest, the ancient enemy, with horrible outcries and tremendous noises, began to imitate the roaring of lions, the bleating of sheep, the braying of asses, the hissing of serpents, the grunting of swine, and the shrieking of mice. Then suddenly Datius, awakened by the voices of so many beasts, rose up vehemently enraged, and shouted aloud to the ancient enemy, saying, 'Wretched creature, fitly hast thou fared. Thou art he who once saidst, 'I shall set my throne upon the North, and shall be like to the most High.' So, through thy pride, thou hast been made like unto the pigs and the mice, and thou, who wouldst have unworthily imitated God, now most worthily dost imitate the beasts.' Hearing these words, the malignant spirit (if I may so speak) BLUSHED at his own degradation."—Pp. 1383, 1384.

Such is the general purport of this disgraceful *farrago* of superstition. One or two more of its miracles may be alluded to, as the germs of more popular legends. The "Sabbath of the Witches" probably originated in the story of a great midnight meeting of evil spirits in a deserted heathen temple, where their proceedings were witnessed by a benighted Jew. Each gave an account of the evil he had committed to their superior; and there was great rejoicing amongst them, on account of a certain Bishop Andrew, whose peculiar temptation, and its result, do not admit of quotation. In the end, the devils discovered the Jew; but, luckily for himself, he had made in his fright the sign of the cross, so they were constrained to let him escape, with the spiteful exclamation, "Pshaw! here is an empty vessel, but it is sealed up and labelled!" *Va! Va! vas vacuum et signatum!*

Here, too, at p. 1444, may be found the foundation of the far-famed apparition of "Old Booty," with the chase of the grey man by the black on the surface of the sea, as witnessed from the deck of a ship, and their final plunge into the crater of Stromboli. Over that same sea, into that same crater, and, in like manner, from the deck of a ship, was Theodoric, king of the Goths, seen to be hurried, with his hands bound behind him, by Pope John, and the Patrician, Symmachus, both of whom he had put to death. Again, at p. 1448, one dying man sends to another to tell him to make haste, for that the ship was ready to carry them to Sicily. This, as further explained by Gregory, denoted that Etna and the other Italian volcanoes were openings into hell, which visibly enlarged, as the end of the world drew near and more sinners were ready for burning—to the confusion of the infidel, and for the correction of living Christians.

He introduces, also, several descriptions of the economy of the infernal regions derived from the testimony of eye-witnesses, where, amongst other strange things, he tells of a bridge, which may possibly have suggested the wonderful bridge of the Koran to his sometime contemporary, Mahomet.

It is as strange as any of the miracles in the Dialogues, that the Church of Rome stakes her authority for the whole compilation, nay, in her accredited formularies, affirms, in no ambiguous terms, that she considers them inspired. "Multos," says the Breviary, in the 6th lesson for the 12th of March, "libros confecit: quos cum dictaret, testatus est Petrus Diaconus, se Spiritum Sanctum columbæ specie in ejus capite sæpe vidisse." He wrote many books, and, while he was dictating them, Peter the Deacon testifies, that he has seen the Holy Ghost, in the shape of a dove, frequently seated on his head!

The worship of relics was followed by the worship of images. This is not the place to relate how images and pictures were

first introduced into churches : how Epiphanius denounced the practice, and Gregory of Nyssa praised it to the skies : how soon it became customary to worship them : how a Council of 338 Bishops at Constantinople, calling themselves the Seventh General Council, ordered that they should be destroyed, as grossly idolatrous : how another Council at Nice, claiming also to be the Seventh General Council, and consisting of about 260 Bishops, uttered its unanimous anathema on all who refused to worship them : how a third Council at Frankfort, claiming also to be General, and where 300 Bishops from Italy, Germany, and France, including the Papal legates, were assembled, unanimously despised and condemned this decision, “*omnimodis adorationem et servitutem renuentes, contempserunt, et consentientes condemnauerunt* ;” (*Acta Conciliorum*, tom. iv., 904)—and how image-worship was finally re-established, as the faith of the Catholic Church, by the Council of Trent. Nor will the miracles, by which it was introduced, detain us long. They are to be found in the fourth action of the Seventh General Council held at Nice in 787, and are spread over upwards of fifty folio pages in Harduin’s edition of the Councils. Probably, so singular a collection of forged and spurious testimonies, false reasoning, superstition, stupidity, and untruth, is not to be met with within the same space in any work written by Christian men. The condemnation and contempt of the Frankfort Council, and of the intelligent Charlemagne, were but too well merited. We should scorn to use such miracles, even in the way of argument ; and we extract but one to justify the terms we have employed. There once lived a recluse on the Mount of Olives, who was tempted by the demon of impurity.

“This evil spirit appeared to him visibly, saying, ‘Swear to me, that you will tell no one what I am about to say to you ; and I shall assault you no longer.’ And the old man swore, ‘By Him who dwells on high, I shall tell no one what you shall say.’ Then said the demon, ‘Do not adore this image, and I shall trouble you no more.’ But it was the image of our holy Lady Mary, the mother of God, holding our Lord Jesus Christ. The recluse said to the demon, ‘Let me reflect.’ On the morrow he sends a message to the Abbot Theodore of Ælia (Jerusalem), who then lodged in the anchorite cloisters of Phari (*ἐν τῇ λαύρᾳ Φαριῶν*) ; and to him, when he came, he related the whole. But the Abbot said to the recluse, ‘Father, have you been so deluded as to give your oath to an evil spirit ? It is well that you have told me. Far better would it be for you to go to every brothel in the city, than to refuse to worship our Lord and God Jesus Christ with his mother in the image !’ Then the Abbot, having comforted and strengthened him by much advice, returned to his own dwelling. Speedily the demon appeared again, and said to the recluse, ‘How is this, you wicked old fellow ? *τί ἐν, κακώτερε* ; Did you

not swear to me, that you should tell no one? and how have you told everything to him who came to you? I tell you, you wicked old man, that you shall have to answer for your perjury on the day of judgment.' The recluse answered him, saying, 'What I have sworn, I have sworn; and I know that I have perjured myself; but I have perjured myself for my Lord and Creator: thee I do not listen to.'—*Acta Conciliorum*, tom. iv. p. 207.

The Fathers ascribe the "spiritual meadow," which Dupin speaks of as a farrago of lies, and from which this story is taken, to Sophronius, though it was written by John Moscus; and on the faith of it, the 260 Bishops and upwards of 100 monks, there in General Council assembled, unanimously agree, that it is right to commit perjury, if the keeping of an oath tend to prejudice the venerable images. In like manner from a forgery, under the name of Athanasius, they tell how an image of our Saviour was pierced by a Jew with a spear, and poured forth blood and water, which wrought miracles innumerable: and so forth.

Passing over the miracles of Malachi of Ireland, who, according to St. Bernard (*Opera*, p. 1929), "partook no more of the barbarousness of his country, than a fish does of the salt of the sea;"* and passing over the greater miracles of St. Bernard himself, which, with a policy worthy of Ambrose, he refused either to affirm or deny, (for they differ in no respect from the ordinary staple,) we shall conclude with two or three miracles from the Breviary itself, which, having passed the severe ordeal of the Congregation of the Rites, may be supposed not only unquestionable, but commanding unlimited assent. Nevertheless, it is said, that of old the guilty could walk unharmed over red-hot ploughshares.

The first is of ancient date; for it belongs to the second century. St. Eustachius, says the Breviary, in its lessons for September 20th, held a military command under the Emperor Trajan. "While he was chasing a stag of extraordinary bigness, suddenly he saw between the horns of the beast at bay a stately and resplendent image of Christ the Lord hanging on the Cross; and, being invited by His voice to the chase of life everlasting," he, with his family, became Christians. Butler thinks these events took place in the reign of Adrian. It is needless to say that there is not the slightest historical foundation for any of the

* Jerome is even less complimentary to the Scots. He says, that they had wives and children in common, and that he had seen them with his own eyes, (*ipse adolescentulus viderim*) eating human flesh; nay, that they preferred it to bacon, beef, and mutton, and were accustomed, as the sole delicacies of their banquets, "*nates pastorum, et feminarum papillas abscindere!*"—*HERONIMI Opera*, tom. ii. p. 50.

facts recorded, and that the whole is pure invention. Indeed Butler judiciously omits the miracle.

St. Raymond of Pennafort was a saint of the thirteenth century. In the sixth lesson for January 23, it is related of him in the Breviary, "He performed many miracles; amongst which this is the most illustrious, that, being about to return from Majorca to Barcelona, he laid his cloak on the sea, and having passed over one hundred and sixty miles in six hours, he entered his monastery, though the doors were shut." This "skimmer of the seas" seems to have anticipated to a nicety the speed of the modern railways; but Alban Butler gravely clenches the story by assuring us, that "a chapel and a tower, built on the place where he landed, have transmitted the memory of this miracle to posterity." This is the faith of the Church of Rome at this hour; for the Breviary, lying on our table, was published at Mechlin in 1843.

St. Francis of Assisium is, however, the great wonder-worker of the thirteenth century. Hearing a crucifix ask him to repair a Church, he privately took a horse-load of cloth belonging to his father, and sold it to help him in this good work. He was often seen lifted up from the ground, sometimes higher than a man's head; and at last, after an extraordinary vision of a crucified seraph, which he witnessed from the top of a mountain, his body was found, when he came down, to have received the impression of the five wounds of Christ. "The heads of the nails," says Butler, "were round and black. The points were long, and appeared beyond the skin on the other side, and were turned back, as if they had been clenched with a hammer. There was also in his right side a red wound, as if made by the piercing of a lance; and this often threw out blood, which stained the tunic and drawers of the saint." This last imposture is favoured with a day for itself, the 17th of September; under which date it will be found related at great length in the Breviary.

Let us come nearer our own times, and try a saint who lived, and died, and was canonized, in the 17th century. "The first flower of South American sanctity," says the Breviary, August 30, "was the Virgin Rose of Lima. She obtained this name, because, when an infant, her face was miraculously changed into the appearance of a rose; but to this the Virgin Mother of God afterwards added a surname, ordering her thenceforward to be called Rose of St. Mary." After many mortifications, and struggles with wicked spirits, she was most highly favoured; for, "familiar," says the Breviary, "with the guardian angel, with St. Catherine of Sienna, and the Virgin Mother of God, in consequence of their continual appearances, she merited to hear these words from Christ himself, 'Rose of my heart, be thou my bride!'"

There is something so shocking and blasphemous in such mixtures of superstition, insane exaltation, fraud, and falsehood, that we feel as if we did wrong in even quoting them; and we most gladly close.

The "Lives of the English Saints," conducted by the Anglo-Roman party, have now reached the fourteenth number. What weight they add to the argument for ecclesiastical miracles, may be judged of from the following sentence.—(No. iv. p. 8.)

"Whether St. Gundleus led this very life, and wrought these very miracles, I do not know: but I do know that they are saints whom the Church so accounts; and I believe, that though this account of him cannot be proved, it is a symbol of what he did, and what he was, a picture of his saintliness, and a specimen of his power."

In this brief review of Ecclesiastical Miracles, we have confined ourselves closely to the historical argument alone, not seeking to enlist the prejudices of the reader, by picturing the gross corruption and idolatry which, by them introduced and supported, burst like a deluge over the whole Christian world, and, everywhere rejecting and shutting out the true spirit of the word of God, caught with a clinging embrace the very abominations of the Heathen. Deliberately rejecting the lying legends, which she has used, but never publicly sanctioned, and the conflicting relics, whose claims she has never determined, and the discovered frauds, which she has never branded, we have drawn our illustrations from the four great Doctors of the Latin Church, Ambrose, Augustine, Jerome, and Gregory the Great, and from those miracles, which, in her Directory for the daily worship of her clergy, she solemnly avouches as true, before God and man and angels. Yet here are to be found the letter of Gregory to Satan, and the Fauns and Centaur of Jerome, and Gamaliel with his red and white roses and his gold and silver baskets, and Augustine's curly-headed negro boys, and his conflicting affirmations, and Pope Gregory's fox and caterpillars and devils blushing and throwing stones at a bell, and the saint that sailed on the sea in his cloak at the rate of thirty miles an hour, and the "stigmata" of St. Francis, and Rose of Lima—that first flower of South American sanctity. Incredible as it may seem, it would be folly to deny, that many in the Church of Rome receive and believe them all, and have believed and received such by the myriad for upwards of 1400 years. Can they believe also in that foul trafficking in relics, from which their Church draws such enormous profits? Can they receive the twenty-two holy coats, or the thirteen holy nails, or the ship loads of the self-multiplying cross, or the feather from Gabriel's wing, or any one convent's or monastery's catalogue roll of relics? Amongst the many millions of Roman Catholics who have passed on into

eternity, amongst the learned, the noble, the intellectual, the brave, the honest, and the illustrious, no voice of pity has been ever heard for the masses who were grovelling in ignorance before bones, and rags, and garbage, which heathens would have turned from in scorn; no voice of power has ever sounded for the glory and honour of the Lord, so shamefully trampled upon and betrayed. The Apostle of God warns the Church of an apostacy, "whose coming in is after the working of Satan, with all power, and signs, and lying wonders, and with all deceivableness of unrighteousness in them that perish; because they received not the love of the truth, that they might be saved; and for this cause God shall send them strong delusion that they should believe a lie." When we are told of "a new dispensation" coming in with power, and signs, and lying wonders, borrowing from that masterpiece of Satan's working—the polytheism and idolatry of the heathen, holding doctrines of demons, forbidding to marry, commanding to abstain from meats, given up to strong delusions, some speaking lies in hypocrisy, others believing the lie—can we doubt that the prophecy has been fulfilled?

No lying wonders introduced or followed the Reformation; no Protestant has ever fallen prostrate before image, chip, or rag, or bent the knee in prayer to dead men, and dead women, once sinful creatures like himself. We beseech our Roman Catholic fellow-countrymen, in no vainglorious spirit, but with all affection and earnestness, to consider these things seriously and calmly; for on their Church or on ours, the apostolic denunciation must inevitably fall. Helplessly entangled by the fatal dogma of infallibility, in the meshes she has twined for herself, the Papal Church can never abandon or retract the most suicidal falsehoods. But to her adherents individually, truth and reason and inspiration may still appeal; and, to such as listen, there may be escape from the strong delusions and lying wonders, which have hitherto blinded and seduced them. Yet so potent are their spells, so fatal their influence, that the struggles of the boldest mind within the pale seem but the helpless flutterings of the bird fascinated by the gaze of the serpent. Is there not something fearful in the thought of the stately temple, the gorgeous ceremonial, the thrilling music, the prostrate crowds, the blind devotion, the prayers, the miracles, the dignified and princely bishop presiding, a Chrysostom, perhaps, or a Borromeo, when we know that all this goodly show in the Church of the living God is gathered round a filing of iron, a splinter of wood, it may be the bone of a brute, or, at best, the skeleton of a dead man?

It must be evident, even from this cursory glance, that no art of man can bridge over the gulf, which separates the miracles of

the Church from the miracles of the Gospel. Jesus went about doing good. He forgave sins, healed diseases, fed multitudes, cast out devils, gave sight to the blind, hearing to the deaf, speech to the dumb, and restored the dead alive to their sorrowing relatives on the moment, without one failure, by a word speaking. Nature bowed to his voice, and acknowledged the bidding of her God: and by works, such as never man did, he enforced words, such as never man spoke. Nothing mean, capricious, or ludicrous, disturbs the majestic and godlike consistency of his life, his character, his doctrines, and his deeds. Like in nature were the miracles of his Apostles.

With government and priesthood and people arrayed to put them down, thousands and tens of thousands, seeing them with hostile eyes, left all the world holds most dear, to testify at the hazard of their lives, how firmly they believed in them. From the multitudes who crowded to behold, there went forth friends and enemies, martyrs, traitors, and apostates; but, in that loud hubbub of voices, not one rises in denial. Had there been fraud, a single apostate (and there were many) would have betrayed it. Was it magic, then, and the power of demons? When we can believe that the Gospel, devised in the councils of the godhead, and announced by the wonders of omnipotence, was the work of wicked men, or of wicked angels, then shall we believe that they made the sun and the stars also, and flung them aloft into the heavens.

Let any impartial man turn from the lives of Hilarion and Antony, written by the learned and accomplished and experienced Jerome and Athanasius, to the Gospels of the fisherman and publican of Galilee; and if he still doubts that the one is of earth, and the other of heaven, we despair of convincing him.

ART. VIII.—*Explanations: A Sequel to Vestiges of the Natural History of Creation*. By the Author of that work. London, 1845.

ALTHOUGH the ingenious author of the "*Vestiges of the Natural History of Creation*" sent forth his work "to take its chance of instant oblivion, or of a long and active course of usefulness in the world," without "expecting that any word of praise which the work might elicit should ever be responded to by him, or that any word of censure should ever be parried or deprecated;" yet he has felt it necessary, under the name of *Explanations*, to reply to the attacks which have, from so many quarters, been levelled against his Theories. There is perhaps no previous example of any scientific work having called forth such a storm of opposition. The astronomer, the geologist, the naturalist, the physiologist, and the divine, have all launched against it the thunderbolts of their wrath. They have called in question its statements—challenged its reasonings—and marshalled against it an array of science, which would have shivered the strongest fabric of human wisdom.

Believing "that the general scope of his work has been in a great measure misapprehended," and that "so much has been excepted to, justly and unjustly, on particular points, that *ordinary readers* might be ready to suppose its whole indications disproved," the author has been "induced to take up the pen, for the purpose of endeavouring to make good what is deficient, and reasserting and confirming whatever has been unjustly challenged in his book." Without questioning the prudence of again involving himself in controversy—or calculating the chance of his putting himself to rights with his readers—or estimating the value of such a triumph, even when achieved, we must express our regret, that his acknowledgments of just criticism—his supplements of deficiency—his reassertions and confirmations of what he thought unjustly challenged, do not exhibit that candour of expression, that accuracy of information, and that modesty of discussion, which are so desirable in controversy, and so becoming in an anonymous defender. We do not complain that he has treated his opponents with actual harshness or incivility, for we believe that he is an amiable and an estimable shade; but we lament that he has overlooked their moral influence, as well as their mental power, while he has formed a sin-

gular over-estimate of the capacity of the arbiters to whom he appeals. In the lengthened controversy which he pursues with the most distinguished of his geological reviewers, the tone of his argument is that of an equal, if not a superior; and he forgets how different would have been the aspect of the debate had it been conducted in person on a public arena. He chides the decisions of Cuvier and Agassiz, with the same boldness and self-complacency. He gives battle to Whewell and Herschel—now claiming them as friends—now smiting them as foes; and he denounces the whole “scientific class,” as he calls them, as incapable of pronouncing a judgment upon his book.

“After discussing,” says he, “the whole arguments on both sides in so ample a manner, it may be hardly necessary to advert to the objection arising from the mere fact, *that nearly all the scientific men are opposed to the theory of the Vestiges*. As this objection, however, is one likely to be of some avail with many minds, it ought not entirely to be passed over. If I did not think there were reasons independent of judgment, for the scientific class coming so generally to this conclusion, I might feel the more embarrassed in presenting myself in direct opposition to so many men possessing talents and information. As the case really stands, the ability of this class to give at the present a true response upon such a subject, appears extremely challengeable. It is no discredit to them that they are almost without exception engaged *each in his own little department of science*, and able to give little or no attention to other parts of that vast field. From year to year, and from age to age, we see them at work, adding, no doubt, much to the known, and advancing many important interests, but at the same time *doing little for the establishment of comprehensive views of nature*. *Experiments in however narrow a walk, facts of whatever minuteness, make reputations in scientific societies*; all beyond is regarded with suspicion and distrust. The consequence is, that philosophy does nothing among us—does nothing to raise its votaries above the common ideas of their time. There can, therefore, be nothing more conclusive against our hypothesis in the disfavour of the scientific class, than in that of any other section of educated men. There is even less; for the position of scientific men, with regard to the rest of the public, is such, that they are rather eager to repudiate than to embrace general views, seeing how unpopular these usually are. * * * * For the very purpose of maintaining their own respect in the concessions they have to make, they naturally wish to find all possible objections to any such theory as that of progressive development, exaggerating every difficulty in its way, rejecting, wherever they can, the evidence in its favour, and extenuating what they cannot reject; in short, *taking all the well recognized means which have been so often employed in KEEPING BACK ADVANCING TRUTHS*.”

In support of these extraordinary opinions, our author calls upon the “reader to bring to his remembrance the impressions

which have been usually made upon him by the transactions of learned Societies, and the pursuits of individual men of science ;” and as an “illustration of their deficiency in the life and soul of nature-seeking,” he quotes from Sir John Herschel a passage on the uses of science, from which he concludes, not that Sir John is incapable of deciding on his Theory of Creation, but that the whole scientific class are disqualified, and that “*it must be before another tribunal that the new philosophy is to be truly and righteously judged!*”

The character of our author’s genius, and the frailty of his judgment, are nowhere more conspicuous than in these unwise and ungenerous expressions. His estimate of scientific men shows how little he has associated with them ; and his opinion of the transactions of learned Societies, and of the reputations which they embalm, proves that he has not understood, if he has perused them. In the mighty temple of science, there are not more venerable and sacred records than those which have been thus depreciated. They are the intellectual pyramids which preserve for distant ages those grand and ennobling truths, which have for nearly two hundred years illuminated Europe—and those very truths, too, which have served the author as the materials of his speculation ! As if he aimed at being the founder of a modern school, our author calls his philosophy *new* ;—an appellation not very inappropriate, as that indeed must be a *new philosophy* which refuses to have philosophers to judge it. If they be disqualified for the task, is it from the Royal Society of Literature—from the Antiquaries—from the political clubs—from the Agricultural Societies—or from a committee of Blue-stockings, that he is to summon the judges who are to preside at this grand inquest on the new philosophy ? We presume that the author himself would not thus degrade his own speculations. The genius of such men has not been fostered among stars and planets. They have not trodden the pavement of the primitive world—nor pried into the mysteries of life—nor pondered over the functions and laws of organic and inorganic being. Our author’s appeal is, therefore, to *ordinary readers*—to that class of the community who seek only poetry among stars, and romance among stones—and who, in our author’s process of mental development, may yet ascend from the capacity of the monad to the wisdom of the crow. Their verdict has been given in the circulation of his work, and he will doubtless value and enjoy it ; but in their applause, philosophers perceive his punishment, and rest with confidence in the belief, that every step which they make towards truth, will place itself in antagonism with the new philosophy.

In again directing the attention of our readers to the *Vestiges*

of the Natural History of Creation, we have no desire to renew the general discussion of the subject. If that be deemed necessary, it should be done by the eminent individual who can bring to it the highest geological knowledge, and to whom the author has, in a more special manner, thrown down the gauntlet. Our object is to consider the replies which the author of the *Explanations* has given to our animadversions—to place the views we entertain in a stronger and more popular light—and to examine the author's explanations in so far as they have an immediate bearing on the religious aspect of the question.

Notwithstanding the powerful objections, bearing the impress of demonstration, which have been urged against the nebular hypothesis, the author of the *Explanations* boldly re-asserts it, and strives to sustain it by feeble and failing buttresses. He denies that it is the basis of his system of development; and, claiming it only as presumptive evidence in his favour, he is obviously prepared to support his own dogma of animal transmutations, even if the nebular and planetary hypotheses were exploded. He forgets, however, that every argument, like a weapon, has two edges, one of which must be directed against its bearer. If in the vast creations of the universe the appearances of natural law, or of any special mode of creation, are disproved, are we not entitled to presume that the Almighty presided at every epoch of change, creating, or destroying, or modifying his works according to his will and pleasure—evoking the world from its chaos—commanding light to be, when light was—summoning from the black earth its verdure—from the deep its moving creatures—man from the dust of Eden, and woman from near the heart of her help-mate. Let the nebular and planetary theories, therefore, be once overturned, as exhibitions of creation by law, and we render infinitely improbable the existence of such a law in the creation and development of animal life; and prepare the intelligent mind for the reception of those noble truths which Scripture and Reason so clearly reveal.

The author begins his defence by replying to our assertion, that after the discoveries made by Lord Rosse's telescope, it was "an unwarrantable assumption that there are in the heavenly spaces any masses of matter different from solid bodies composing planetary systems."*

"The nebulae," he says, "are said to be now shown as clusters of stars, rendered apparently nebulous only by the vast distance at which they are placed. There is often seen a *greater vehemence and rashness*

* See this *Journal*, vol. iii., p. 477. We might have added that the assumption was equally unwarrantable before any telescope whatever was applied to the heavens.

in objecting to, than in presenting hypotheses, and we appear to have here an instance of such hasty counter-generalization. The fact is, that the nebulae were *always understood* to be of two kinds : 1st, nebulae which were only distinct clusters, and which yielded one after another to the resolving powers of telescopes, as those powers were increased : 2d, nebulae comparatively near, which no increase of telescopic power affected. Two classes of objects wholly different were from the partial resemblance recognized by one name, and hence the confusion which has arisen on the subject. The resolution of a great quantity of the first kind of nebulae, by Lord Rosse's telescope, was of course expected, and *it is a fact*, though in itself interesting, *of no consequence to the nebular hypothesis*. It will only be in the event of the second class being also resolved, and it being thus shown that there is only one class of nebulae, that the hypothesis will suffer. Such, at least, I conclude to be the sense of a passage which I take leave to transfer in an abridged form from a recent edition of Professor Nichol's work."

Now this passage embraces a satisfactory proof, that both our author and Professor Nichol have failed to apprehend the force of the argument to which they offer so feeble a resistance. If there be vehemence, and rashness, and hasty counter-generalization in our proposition, let us try to discover the character of the reply. The *fact is*, says our author, *that the nebulae were always understood to be of two kinds*. This is indeed a strange *fact* to be made the basis of an argument. Who always understood nebulae to be of two kinds ? and why were they so understood ? These questions the author cannot answer ; and even if he could prove that every astronomer, from Pythagoras to Professor Nichol, did so understand nebulae, does this afford the slightest proof that nebulae are of two kinds ? Our author rejects the authority of names when marshalled against his own theories, but he clings to the very shadow of them in his own time of need, and greedily adopts as truth what persons *unnamed* even, are only *understood* to have *conjectured*. Astronomers, however, have never had any such understanding of nebulae, and nebulae have never been so classed. These luminous masses never can have any other distinctive character than that of being *resolvable into stars*, and *not resolvable* ; and the idea of *nebulae comparatively near* is a discreditable fiction, which the astronomical mind must reject with scorn. *There are no distances in the sidereal universe but those which are measured by parallax*, and the only distances thus measured are those of *a Lyrae*, *a Centauri*, and *61 Cygni*.* Were we to guess sidereal depths, every person would pronounce *a Lyrae* to be nearer than the very faint star of *61 Cygni*, and yet it is millions of millions of miles more remote. What astronomer then,

* See this *Journal*, vol. iv., p. 227, and p. 228, note.

or what "*ordinary reader*" will ever dare to speak of nebulae as *comparatively near*, or *comparatively distant*? The phrenologist, indeed, that can see through bone, or the mesmerist than can make his dupes see—what he himself cannot see—through ruble walls and granite mountains, may measure with their fancy-chain the interminable lines of space; but reason protests against the competency of the tribunal, and spurns its decisions!

These observations might have sufficed were we reasoning with unbiassed disputants; but as the author appeals to "*ordinary readers*," we must endeavour to take a simple view of the subject. Before the invention of the telescope *certain white spots* were seen in the heavens, and this is all that astronomers knew of them; and all they could say of them was that they were *white spots*. The miniature tube of Galileo resolved a number of these white spots into clusters of stars, and hence it was *proved* that some of the white spots were clusters of stars in the telescope. This is all the information that the telescope gives us. It does not tell us that the spots are nebulous matter; on the contrary, it renders it very probable that they are all clusters of stars. If, on looking over a flat country, we saw a number of white spots, generally of the same character—if we found by the telescope that one of them was an encampment in which the separate tents were visible, and that telescopes of higher power resolved more and more of the white spots into tents, would we not conclude that all the white spots were tents, and would we not ridicule the speculation that the unresolved white spots were bleaching-greens covered with webs, or fields sprinkled with lime; and the more so, if telescope after telescope brought to decide the question, had actually resolved into tents an additional number of the supposed bleaching-greens and lime-fields?

While the white spots in the heavens were reckoned clusters of stars, Sir W. Herschel viewed them with his fine telescopes. He saw, for the first time, some round white spots with bright centres of different degrees of whiteness, and he conjectured that these were masses of minutely divided matter, conglomerating into stars. Hence arose the idea that a nebula was a star in its infancy, and that all other stars had once been in the nebular condition. So far this conjecture was not wholly devoid of probability; and if it had been proved by accurate observation that any one round white spot had contracted in its dimensions, while its central portion had become brighter, the probability of the conjecture would have been greatly increased. But no such changes have been observed—no progression of a nebula to a star has been seen, and many of the nebulae supposed to be, or rather seen to be, round, appear in Lord Rosse's telescope as shapeless masses furnished with irregular appendages, like the

limbs of a lobster. There is, therefore, no ground whatever for believing that so much as one true nebula exists, or that there is in the whole sidereal heavens any minutely subdivided matter, excepting that which constitutes light or its medium. Nay, if we even suppose that Lord Rosse's telescope shall discover 100 new white spots for every one which it resolves into stars, our argument remains in its original force, and proves that stars—single or in clusters—are the only forms in which sidereal matter is known to exist.

As a remarkable illustration of the new cosmogony, and one which takes away from it the character of a "splendid vision," our author adduces the beautiful experiment of our friend, Professor Plateau of Ghent,* who caused a spherical ball of oil to revolve in a mixture of alcohol and water of the same specific gravity. When thus freed from the action of gravity, it assumes a spheroidal form, and by increasing the velocity of rotation, the equatorial parts swell out horizontally, and the sphere of oil is transformed into a perfectly regular ring, whose section is a circle or an ellipse. Seizing upon this experiment, the author of the *Vestiges* tells us, that "the only observable difference between the latter (the ring above mentioned) and the ring of Saturn is, that it is rounded instead of being flattened; *but this is accounted for in a satisfactory way.*" Now, this is not the case. M. Plateau does not, and cannot account for the difference; and if our readers will look at the fine drawing of Saturn's ring, by Sir W. Herschel, and mark its perfectly flat surface and square edge, like the horizon of a globe, he will agree with us in asserting that the flat ring could not have been thrown off by rotation from the planet, unless he supposes that Old Saturn had sent a colony from his body to level and square the territory of which he had been deprived.†

From the experiment of Plateau, our author passes to the discussion of what he calls "particular objections," to the nebular cosmogony; and although most of these which come under his notice were urged in our Review, he does not give us the credit of making them, but attaches our name chiefly to the charges

* We regret to hear that this eminent philosopher, to whom the sciences owe many obligations, has been struck blind while pursuing these interesting experiments.

† We omit noticing the other results of this fine experiment, which our author presses into his service, such as the division of the oil ring into separate revolving globules, &c., because these phenomena take place in consequence of a rotatory motion being produced in the alcoholic medium—a condition which cannot exist in world-making. Besides, there can be no analogy between a fluid sphere revolving in another fluid of the same density, and a sphere of fire-mist, millions of millions of times rarer than hydrogen gas, revolving in a vacuum.

of ignorance which he prefers against us and others of our craft.

"Of particular exceptions," he says, "it is not necessary to say much. That there should be difficulties attending such a hypothesis is only to be expected; but where general evidence is so strong, we should certainly be scrupulous about allowing them too much weight. It is represented, for instance, that the matter of the solar system could not in any conceivable gaseous form fill the space comprehended by the orbit of Uranus. (See *North British Review*, vol. iii., p. 480.) If this be the case, let it be allowed as a difficulty. It is pointed out that the planets do not increase regularly in density from the outermost to the innermost. Their sizes are also not in a regular progression, though the largest, generally speaking, are towards the exterior of the system. It was not, perhaps, to be expected, that such gradations should be observed; but grant that there was some reason to look for them, their absence constitutes only another and a slight difficulty. Then we know of no law to determine the particular stages at which rings are formed and detached. (See *our Review*, p. 479.) Be it so—although something of the kind there doubtless is, as the distances of the planets, according to Bode's law, observe a geometrical series, of which the ratio of increase is 2. From *these objections which cannot now be answered*,* let us pass to some which can."

This passage affords an excellent illustration of the manner in which our author slides out of difficulties otherwise unanswerable. The first of these difficulties, namely, that the matter of the solar system could not, by any conceivable gaseous form, fill the sphere enclosed in the orbit of Uranus, was brought forward by us as a *reductio ad absurdum*, as an entire demolition of the theory. We expected the author to make the calculation we suggested, and never doubted that he would have been "scared with the sound himself had made;" but he is imperturbable on his throne of fire-mist, and says with great naïveté, *If this be the case, let it be allowed as a difficulty*. A difficulty, indeed! It is a demonstration of the utter absurdity and impossibility of his theory. His fire-mist, the very pabulum of his hypothesis, must be *many millions of times rarer than hydrogen gas*! and, therefore, physically incapable of performing the functions he assigns to it.

In pressing into his service a new argument, founded on the once igneous fluidity of the earth, our author gives us some aid in the present discussion.

"Since that time," says he, "it has cooled, at least in the exterior

* Our author has omitted to notice many other unanswerable objections which we have urged against his theory. He has not ventured, for example, to explain how in the agglomerated mass the *opaque* planetary masses were separated so as to leave the *luminous* solar part in the centre of the system.

crust. We thus have it passing through a chemical process, attended by diminishing heat. Whence the heat at first, if not from the causes indicated in the nebular hypothesis? But this is not all. In looking back along the steps of such a process, we have no limit imposed. There is nothing to call for our stopping till we reach one of those extreme temperatures *which would vaporize the solid materials*; and this gives us *exactly that condition of things which is implied by the nebular cosmogony.*"

Admitting these views, what would be the condition of the vapour thus formed? The fluids and solids of gaseous origin would return to their pristine state, while the solid materials would pass into vapour, containing the fifty-five simple substances which chemistry recognizes, or into their elements, if they are decomposable. The average density of such a fire-mist must be greater than that of hydrogen, if both have the same freedom to extend in space; and we defy the author, upon any conceivable hypothesis, to give to such a vapour, if derived from all the planetary bodies, a specific gravity a million million times less than that of hydrogen.

But the difficulty is not thus limited. We have shown in our review of *Kosmos*,* that the star nearest to us is *α Centauri*, the distance of which is 12,000 times the distance of Uranus from the sun, and that in the space devoid of stars between *α Centauri* and our system, there is room for one-and-a-half million millions of systems the size of our own. Why has no prolific atom in this vast desert, and beyond the sphere of *α Centauri*, peopled it with systems? What is the mechanical condition of the circular margin from which the fire-mist of Uranus was separated? How far is this frontier beyond the orbit of Uranus? and why does not so stupendous a mass of self-luminous matter show itself, and shine more brightly than the nebulae which lie far beyond it, and are equally uncondensed?

Without multiplying these unanswerable questions, we shall content ourselves with stating, that if the principles of the nebular theory are well-founded, it will follow as a necessary truth, that if any portion of sublunary matter is vaporized in free space, so as to form an atmosphere of gaseous matter in a state of absolute rest, it will, in virtue of its inherent powers, agglomerate round a centre, acquire a rotatory motion, throw off rings, planets, and satellites, and settle down into a stable and permanent system of worlds. A sphere of sugar would thus pass into carbon, oxygen, and hydrogen, and by the confectionary process of natural law it would be conjoined into an universe of sugar-plums!

From the difficulties which our author cannot answer, we pass

* See this *Journal*, vol. iv., pp. 227, 228.

to those which he says he can ; and the first of these is our assertion that a rotatory motion would not be produced by the slow advance of the atoms in radial lines to a centre.* To this our author replies,—

“ Now, there can be no doubt, that a confluence proceeding precisely to a centre *has this result* ; but this is only an abstract truth, not an exact and absolute description of any actual confluence of the kind. The explanation was afforded by Professor Nichol long before the objection was started.”

Now, Professor Nichol's explanation is merely this, that “ in almost no case do streams (of water) meet and intermingle without occasioning, when they intermingle, a dimple or whirlpool,” and that “ in this circumstance, in the whirlpool to be expected where the nebulous floods meet, is the obscure and simple form of rotatory movement.” All this is doubtless true of water streams, not one of which either proceeds from a single point or to a single point, and consequently cannot have a single focus of convergence ; but such a process has not the remotest similitude to the radial confluence of the particles of an uniform undisturbed medium a million and million times rarer than hydrogen, and meeting with no obstruction in their slow agglomeration. In the water streams of Professor Nichol, the motion is the result of an external power, and a collision is the necessary consequence of their union ; but in the slow advance of particles in virtue of their attraction to a state of rest, no rotation and no collision can ensue. If streams of water advanced slowly to a centre where there existed an intense cold capable of congealing them, we should find something like an analogous case to the fire-mist process, and no rotatory motion would in this case be produced.

But, as if conscious of the frailty of his analogy, Professor Nichol has recourse to a most mysterious agency. “ The very act,” says he, “ of the condensation of the gaseous matter as it flows towards a central district, almost necessitates the commencement of a process, which, though slow and vague at first, has, it will be found, the inherent power of reaching a perfect and definite condition.”

The act of *almost necessitating* a movement, is a kind of impelling power with which we are not acquainted ; nor can we conjecture who the persons are by whom *it will be found* that a proper rotatory motion is the necessary result of condensation, nor what kind of process it is that has an *inherent power* of producing motion—that is, a power which will do the work required, when the *almost necessitating* condensation refuses to necessitate!

* See this *Journal*, vol. iii., p. 479.

Without noticing the truly ridiculous explanation which our author persists in giving of the retrograde motion of the satellites of Uranus, we come now to discuss the very important question of the existence of vertebrate animals—of fishes in the earliest fossiliferous strata—the clay, slate, and grauwacke systems of geologists. In opposition to our author's statement, that at this early period of animal life, "neither fishes nor any higher vertebratæ as yet roamed through the marine wilds," we asserted, on the authority of Sir Henry de la Beche, that the remains of the bones and teeth of fish, and defensive fin-bones, called ichthyodolulites, were found in the grauwacke slate, a fact to which Sir Henry called the particular attention of his readers, "as it shows," says he, "that the class of animals to which they belong was among the earliest inhabitants of the globe." In contradiction of our criticism, the author replies, that we were "not aware that since the publication of De la Beche's 'Manual,' the *lower fossiliferous rocks* had been divided into several distinct formations, in the lowest of which, *it is fully admitted*, there are no vertebratæ." This reply is, in our opinion, a very disingenuous one. The author knows, and has published the fact in his "Explanations," that the opinion which he adopts is *not fully admitted*, and with this knowledge in his mind, and before his eye, he goes on in a presumptuous note, accusing most of his reviewers of ignorance, to make the same assertion:—

"Objectors," says he, "to the development theory, have, in the eagerness of counter-theorizing, committed themselves on the subject of the Silurian fossils in a way which they will yet feel to be extremely awkward. The *North British Review*, we have seen placing even fishes in the first fossiliferous rocks, grounding this statement on an authority (Sir H. De la Beche's Manual,) which has been *antiquated for nearly eight years*, a vast period in geological history. The *British Quarterly Review* is equally unfortunate. 'The author's theory,' says this writer, 'requires that these animals should be the lowest in the animal scale. But no argument can convert a *fish*, with its backbone, and highly developed nervous and muscular systems, into an animal of low organization.' (!) The dogmatic allegations of the *Edinburgh Reviewer* are sufficiently exposed in the text. I have only further to express my surprize at finding Dr. Whewell participating in the *mere ignorance* of the first two of the above mentioned Journals.*

* In another note, occupying part of two pages, the author of the *Vestiges* emblazons an oversight of the eye which we committed in mistaking *Ctenodus* for *Ctenoids*. That this was the character of our mistake he must have seen from the evidence in p. 494-5 of our Review, that we had carefully studied that interesting portion of Agassiz's work, which exhibits the commencement, ascendancy, and disappearance of the various order of fishes in the different formations. This display of our *grave mistake* comes ill from one who, in studying the *Silurian* system, never observed the words *upper* and *lower* as indicating its subdivisions.

In the preface to a volume which he has recently published, under the title of *Indications of the Creator*, he meets my argument with a *crude and incorrect* view of the fossil history, commencing with this sentence, 'vertebrated animals do exist in the Silurian rocks, from which the asserted law (that of development) excludes them.' The existence of a non-pisciferous formation had been unknown to him. Many of the objections made to the development theory, in obscurer quarters, rest on errors of a similar kind."

The charge against us of not being aware of the division of the lower fossiliferous rocks into several distinct formations, independent of its being untrue, is not gracefully made by an author *who was ignorant of it himself*. In the 4th edition of the *Vestiges* which we reviewed, he clearly shows that he did not know of the division of the *Silurian System* into the *upper* and the *lower**—a division, too, which he thinks so important, that after learning it from the *Edinburgh Review*, and introducing it, for the *first* time, into his *Explanations*, he excludes fishes from the lower, and admits them into the *Upper Silurian* rocks. When Dr. Whewell states, "that vertebrate animals do exist in the Silurian rocks," and is taunted with *mere ignorance* for doing it, he expresses an undoubted truth, and that, probably, on the direct authority of Professor Phillips, who expressly asserts "that fishes appear in the Silurian rocks," and also, that "in the Silurian rocks near Ludlow, a whole bed of fish-bones and scales are found."† With regard to the existence of fishes in the *Lower Silurian*, or the lower fossiliferous rocks, a difference of opinion exists among the ablest geologists. Mr. Murchison, a high authority, doubtless, asserts the absence of them; but Mr. Lyell, so recently as January 1845, strongly and pointedly maintains, that true fishes are found in these strata, and that too in language so *positive* as to exclude the *negative* evidence of a thousand geologists. "The *fact*," says Mr. Lyell, "that *with the earliest type of organization, we meet with VERTEBRATED animals, TRUE FISH*, so far from being explained away, since I affirmed it, in my book, *is confirmed and extended by fresh evidence*."‡

We cannot quit the subject of the earliest fossils without saying a few words on their degree of organization—and this is the more important, as the subversion of our author's views in the very first era of organic life, will render it unnecessary to follow

* Compare *Vestiges*, 4th edit. pp. 61, 62, *note*, 63, 65, *note*, 67, 68, 73, and 237, with the *Explanations*, pp. 32, 35, *bis*, 36, 38, 44, *bis*, 46, 48, 49.

† The author himself actually speaks of "*the Silurian Fishes*," in p. 68. 4th ed.

‡ M. Strzelecki, in his *Physical Description of New South Wales, &c.*, Lond. 1845, enumerates *Ichthyodondrites*, or the fin-bones of fishes, among the earliest organic remains of the sedimentary rocks.—Pp. 68 and 292.

him in his erroneous discussion of more recent fossils. In place of animals "of the simplest and most primitive type, giving birth to the next type above it, and this again to the next higher, and so on to the very highest," we find in the earliest fossiliferous strata crustacea with the most perfect organs of sensation, and cephalopods of the highest organization, without any trace of simpler types that preceded, or higher types that followed them. Our author feebly meets this difficulty by saying, that such facts would only denote that, in the first seas, the creative energy has advanced animal life, in the space of one formation, to the highest forms possible in this element, excepting such as were of vertebrate structure. But unless these forms passed into one another in an ascending scale, and through the medium of ordinary generation, the allegation that such an advance took place, or might take place, is as incorrect when stated as a fact, as it is ridiculous when given as an explanation.

But in place of comparing the fossils of one formation with each other, let us, like Professor Phillips, compare those of one group, but of different geological eras.

"The bivalve Mollusca," says this able geologist, "of the oldest *Snowdonian* rocks* were certainly as complicated, nay, more highly organized, than the greater number of conchifera of the present ocean, since they belong to the brachiopoda. The crustacea of the *Silurian* system were at least as curiously organized as the limuli of the North American coasts. The Goniatites of the mountain limestone, are far more curiously constructed than the nautili, which lie with them, and also inhabit western oceans. The belemnites and ammonites, turritiles, and other extinct genera of the oolite and chalk, reveal to us an extinct order of cephalopoda larger, more powerful and more curiously organized, than existing Lolligines and Sepiæ. It is evident, therefore, that the whole notion of a gradual amelioration or enrichment of the animal organization may be dismissed as a mere illusion of the fancy of a finite being, who vainly transfers to the work of the Almighty the pattern of his own limited labours."

When in the process of transmutation, a higher type of animal springs from a lower type, the change of structure must have some transition character which will show itself in the more important organs and structure of the transmuted species. Now, the eyes of one of the cephalopods, the *Sepia Loligo*, is distinguished from the eyes of all other animals, marine or terrestrial, by peculiarities so extraordinary, that the types from which it ascended, and those to which it has given birth, might be expected to exhibit an approximation to its structure.

The crystalline lens of the *Sepia Loligo*, or *Cuttlefish*, differs from that of all other animals in its being a compound lens, consisting of a principal lens deeply convex behind, and slightly convex before, and of a meniscus, with a predominating convexity, placed in front of it. The concave face of the meniscus, as we have found, is kept in contact with the slightly convex face of the principal lens by means of a transparent cartilaginous ring, so that the lens consists of *three separate parts*! In the lenses of all other animals, the laminae which compose them consist of fibres, but in the *Loligo* they are continuous films having a fibrous structure radiating from the pole of the posterior surface of the principal lens. In all other animals, the fibres terminate either in single poles, or in lines called *Septa*,* so that, generally speaking, each fibre in the same lamina has the same length. But in the *Loligo*, the virtual fibres terminate (like a bunch of hair cut across) in the anterior surface of the principal lens, and their extremities forming that surface, are curiously bound together, and covered with a fine membrane. Here, then, we have an organ of sensation unique in the animal economy, and exhibiting a degree of complexity and high organization which is found in no other animal. If the *Loligo* has sprung from a lower, or has been transmuted into a higher type, we ought to have found in both some traces of so extraordinary an organ.†

* See *Phil. Trans.* 1836, p. 35, &c.

† Since the above paragraph, founded on dissections of our own, was printed, we have accidentally met with the following very striking confirmation of our argument from the pen of Cuvier:—"No deviation in the ordinary form of this animal (the *cuttlefish*) has ever produced or can constitute a being placed beneath it; nor can, or ever will its better development give rise to a series of animals of a more perfect species to be classed immediately above it."—*Proceedings of the Academy of Sciences*, Brande's Journal, vol. iii. p. 148. Upon turning to Cuvier's *Memoir on the Mollusca*, the same argument is more strikingly developed,—“Every person that reads this short description must be struck with that apparatus of organic parts, as highly developed, and of the same nature, as in vertebrated animals, employed in the composition of a being entirely different, both with regard to its plan and general arrangement, interior as well as exterior. These fibres—that medullary matter—those arteries—those veins—those valves—that parenchyma—that eye—every thing is fundamentally the same, and yet otherwise interlaced and otherwise combined. If we except the organs of smell, the system of the vena porta, the absorbent vessels, the skeleton, and the urinary organs, which are, perhaps, replaced by the ink-bag, we shall find nearly all the functions which belong to fishes, and yet there is no resemblance, no analogy of arrangement. The most prejudiced imagination must see that the arms which crown the head can never become fins; the cartilages which strengthen the back can never change into vertebrae; and three hearts at the bottom of the abdomen can never ascend to the throat to become one. In vain shall we attempt to approximate these mollusca to some fishes whose skeleton has almost disappeared: These last are not less fishes by their other organs, by the form of these organs, by their mutual position, and by the whole of their configuration; and all this does not exist in our cephalopodes. In a word, we see here (whatever Ben-

Having finished his reply to the criticisms of his principal geological assailant, our author ventures, rashly and ill-prepared, to discuss the religious bearing of his speculations.

"I have now," says he, "to allude to a class of objections, different from those made on scientific grounds; but, fortunately, not less easily replied to. It has appeared to various critics, that very sacred principles are threatened by a doctrine of universal law. * * A natural origin of life, and a natural basis in organization for the operations of the human mind, speak to them of fatalism and materialism; and, strange to say, those who every day give views of *physical cosmogony*, altogether discrepant, in appearance, with that of Moses, apply hard names to my book, for suggesting an *organic cosmogony*, in the same way liable to inconsiderate odium. I must firmly protest against this mode of meeting speculations regarding nature. The object of my book is purely scientific. The views which I give of this history of organization, stand exactly on the same ground upon which the geological doctrines stood fifty years ago. * * * A little liberality of judgment, would enable even an opponent of my particular hypothesis to see, that questions as to reverence and irreverence, piety and impiety, are practically determined very much by special impressions on particular minds. * * * The absence, however, of all liberality on these points in my reviewers, is striking, and especially so in those whose geological doctrines exposed them to similar misconstructions. If the men newly emerged from the odium which was thrown upon Newton's theory of the planetary motions,* had rushed forward to turn that odium upon the patrons of the dawning science of geology, they would have been prefiguring the conduct of several of my critics, themselves hardly escaped from the rude hands of the narrow-minded, yet eager to join that rabble against a new and equally unfriended stranger, as if such were the best means of purchasing impunity for themselves. I trust that a little time will enable the public to penetrate this policy, and also the real bearing of all such objections. They must soon see, that if a literal interpretation of Scripture is an insufficient argument against the true geognostic history of our earth, so also must it be against all associated phenomena, supposing they are presented on good evidence."

In this very singular passage, as destitute of candour as it is void of truth, the writer accuses his critics of "*meeting his speculations regarding nature*" with charges of fatalism and mate-

net and his followers may say) nature passing from one plan to another, making a leap, and leaving between its productions a manifest hiatus. The cephalopodes are not passing into any thing else. They have not resulted from the development of other animals, and their proper development has not produced any thing superior to themselves—a consideration which gives them a high degree of importance in natural history, because they overturn a great number of vain systems."—*Mémoire pour servir à l'Histoire et à l'Anatomie des Mollusques*, par M. Le Chevalier Cuvier. Paris, 1817, p. 42.

* We never heard of any such odium being thrown upon Newton's theory.

rialism, and of opposing a literal interpretation of Scripture to a work purely scientific. On behalf of our brother critics, we repel the charge as utterly groundless. We have met the science of our author with science of our own—and with that science, too, which is universally recognized in the scientific world. We have examined his theories in the light of existing knowledge; and to the dialectic ordeal of reason and philosophy, have we alone submitted them. A truth in Scripture has never once been urged in opposition to a statement in his theory; and we spurn, with the deepest feelings of its injustice, the monstrous charge against the high-minded cultivators of geology, “that they are eager to join the rabble against an unfriended stranger, in order to purchase impunity for themselves.” *Geological theory*, it is true, once stood opposed to a particular interpretation of a few verses in Genesis; and several pious men were alarmed at the apparent collision: but when *geological theory* became *geological truth*, that truth was cheerfully received, and accepted, too, as a bright ray shed upon the Mosaic cosmogony.

Had the theories of creation under our review—even the formulæ for making worlds, and the recipes for manufacturing life and immortal souls—been stamped by reason, and opposed only by the literal interpretation of a few passages in Scripture, they would have been respectfully received and fairly judged. Physical truth would have triumphed over canons of criticism, and the Book of Knowledge would have been freely opened to receive it. But how different is the character of the speculations in question! Let us briefly look them full in the face, and try if we can find in the temple of Divine truth either a shrine for their priest, or an altar for his hecatombs.

In the beginning, all space is occupied with a fire-mist—a hot uniform vapour, embracing, by the Divine will, the elements and laws of every thing organic or inorganic, material or spiritual, that exists at the present moment in our earth, and throughout the universe. In this gaseous chaos repose the atoms of vegetable life—the germ of the cedar and the oak—the molecules of the meat and the drink of future life. There sleep the albuminous ovaria, and the unchafed electric that is to smite them into life, and propagate the vital spark through the long chain of being, from the monad up to man. There slumber the elements of the human soul—the atoms that are to think, and love, and be immortal. In this charnel-house of nature, where silence broods, and death universal reigns, a particle of vapour bestirs itself. It is joined by others. They collect into a heap—the heap melts—revolves—throws off worlds, and one of these is the mighty globe which we inhabit. In its bosom lie the germs of living things. The vapours rise—the sky lowers—the

fires of heaven are let loose—the lightning-bolt strikes the pregnant atom—and LIFE, that mysterious essence, stands before us a moving yet helpless novelty. “Sensation and intelligence are kindled by the impulse,” and behold a brute with instinct, the grandsire of responsible and immortal man!

To a theory like this, the once unpopular truths of Geology bear no resemblance; and there is no interpretation of Scripture, either partial or general, with which it can be reconciled. It stands, on the contrary, in brazen opposition to the whole economy of the Old and New Testament, and it gives the lie to every truth which they contain. It is at once rank materialism and unmitigated fatalism; and it is impossible to peruse the *Vestiges* and their Explanation without arriving at the conviction that the author feels, and almost admits, its antagonism to revealed truth. When he says *that there MAY be a faith derived from his view of nature*, which may sustain us under the woes of life, he expresses his conviction, *that there is no such faith*. And when he can find no part of his theory allied to Christianity, but the “*universal brotherhood, and social communion of man*,” and, in virtue of our being an advanced type of the brutes, calls upon us to respect their rights and even their feelings,—he encourages us to the duty by the promise, that “*from obeying these moral laws, we shall reap as certain a harvest of benefit to ourselves, as by obeying any code of law that ever was penned*,”—that is, as we interpret it, any law that was thundered from Sinai, or preached from Mount Tabor.

We regret the necessity under which we are laid to give utterance to these sentiments. We have anxiously sought in our author's pages for some token of his religious belief—for even a stray sentiment that could be magnified, and urged in arrest of judgment. But we have found neither. Our charity, too, has failed us. We know the danger, and feel the cruelty of rashly judging a neighbour's heart; but if that heart is too liberal of its issues, we may judge of the fountain by its stream. If it is seen beating through the skin, we may at least count its throbs. The author whom we pity and rebuke, has given full vent to his inmost thoughts on the exciting subjects of the origin, the condition, and the destiny of his species. He confesses that they are hostile to “existing beliefs, both philosophical and religious.” He allows that the “collision” may be “vexatious,” and he knows that they are utterly irreconcilable with those cherished truths which are the safeguard of states, and the best securities for domestic and individual peace—the only truths which restrain in temptation—console in sorrow, and smooth the rugged passage to the grave. But though thus at enmity with his opinions, we do not desire him to renounce what his

reason and conscience teach him, or to suppress what he thinks will enlighten and reform his race. We do, however, demand, that he shall not wave the banner of the Crescent under that of the Cross; and that he shall not invite the Christian world to an infidel standard, by the deceitful cry that he is combating for truths which are compatible with revelation, or instructing us in knowledge which will lead to heaven.

It is fortunate for the author of the *Vestiges*, though perhaps unfortunate for his disciples, that he presents to his opponents but the shadow of a name. Were he to appear in the solidity of flesh, or even in the purity of marble, his science, though unimpeached, would not yield him a reputation, while his scepticism, though denied, would thin the ranks of his followers, and limit the future sphere of his proselytism. Although we believe that the truth of our views would be confirmed, and the fallacy of his displayed, were he to become *personally* responsible for his writings;—we yet advise him to retain his mask—to “re-sign the strife for fading bays,” and to seek in some “little department of science” that true fame, which, though it commence in “scientific societies,” may yet extend over Europe, and secure him a niche in the true temple of science. From the investigation of facts, he will rise to the determination of laws, and may then enjoy the luxury of generalization within that limited sphere, of which he has scanned the depths and studied the materials.

ART. IX.—*Critical and Miscellaneous Essays*. By THOMAS CARLYLE. 2d Edition. 5 vols. small 8vo. London, 1845.
Lectures on Heroes and Hero-Worship. By THOMAS CARLYLE. 2d Edition. Crown 8vo. London, 1845.
Oliver Cromwell's Letters and Speeches: with Elucidations. By THOMAS CARLYLE. 2 vols. 8vo. London, 1845.

As this is the first opportunity, in the course of our critical labours, that we have been led to notice the very remarkable author of the prefixed works, our readers will easily pardon us, if we introduce our notice of his last publication by some general remarks upon his writings. An author of his established reputation is, no doubt, above being dependent on contemporary criticism as a certificate for public influence or favour. No sentence of ours can make or unmake him as a literary star of the first magnitude—one of those lights by which men steer their way through many deep and dark passages of mental life. Whatever our verdict upon him, he will continue to lead or mislead, to enlighten or to dazzle, a large class of reflective readers. But although we can scarcely regard him as a candidate trembling before us for our approving nod, criticism may be as well and usefully bestowed upon him, as if he were a neophyte stepping with doubtful tread over the first confines of authorship; for our public duty is at least as much concerned with the performances of those within the circle as in guarding its approaches. When an author has overpassed the clouds and mists of his dawn, and reached his meridian, he has attained the summit of influence for good or evil; and although the critic's lash may fall ineffectually enough for any purpose of correction on one whose habits are indurated by age and fame, it is not less our duty to endeavour to direct, and, if needs be, to qualify, the tendencies on public taste and opinion, which such popularity promotes.

An original and vigorous thinker like Mr. Carlyle, with his scorn of antiquated opinion, and liberty and even license in thought as in language, especially when combined with a picturesque imagination, and a quaint raciness of conception, is, in this age, the master of a very powerful weapon. The courage to think on all subjects with unfettered freedom, and to delineate these thoughts, fresh and unrestrained as they spring, with a touch of unrivalled boldness on his canvas, is sure, in the hands

of a man of mental genius and power, to raise him to the station of a thought-compeller—not a guide merely, but a suggester of habits of thinking, and modes of acting, among those over whom his influence extends. We know many greater writers, in every sense, than Mr. Carlyle is; but, perhaps, there is no living English author—if he can properly be called so—who has a stronger and deeper hold on the minds of the English community. One cannot read his works and then cast them aside. The rich display of thought which they contain indicates still unexhausted veins in the mine from which it is obtained; and the reader shuts the volume, or pauses half way, to follow out some dimly suggested train of deepest and profoundest meaning. Thus, while other authors may be, in a looser sense, more popular, and more rapidly and eagerly read, we doubt if there is any one, whose works have gone more deeply to the springs of character and action, especially throughout the middle classes. Before, therefore, drawing the attention of our readers to the last publication in the prefixed list—which yields nothing in singularity or in interest to its predecessors—we think a few pages may be profitably, and, we hope, agreeably, spent in endeavouring to form some just estimate of Mr. Carlyle's merits as a philosophical writer, and as a guide to public thought and opinion.

In some respects, such an analysis presents little difficulty; his merits, as well as his faults, are sufficiently on the surface. No one can read two pages of any of his works without perceiving that his author is a man of powerful and inventive reflection, with a clear eye, in general, for the reality of things, and a very deep disdain for the robes and trappings of antiquity and prejudice. The reader finds bold thoughts, portrayed in language at least as bold, but conveying, sensibly and strikingly to the mind, the ideal picture which shot across the author's imagination; and usually presenting, in unwonted vividness, some very ordinary truth, the importance of which was never before so strongly perceived. On the other hand, his utter disregard of rule, and perverse rebellion against the ordinary laws of composition, as well as all the conventional propriety of language or belief, would make an unaccustomed reader regard him with something of the feelings with which the loyal Lord Mayor and Aldermen of London might have seen and heard the astounding presumption of Wat Tytler, or Jack Cade.

All this is plain enough; and if Mr. Carlyle were a young recruit, we should be inclined to be very kind to his genius, and as blind as we could to his defects. But such is not our present mood. We and the public have enough of experience of Mr. Carlyle to know, that he is the last man that requires to be informed of his own merits, and that his lamp of light is in no

danger of expiring under unencouraged diffidence. Of reputation, and deference and flattery, he has had his fill—too much, perhaps, for the eradication of those large spreading weeds which deform his luxuriant verdure. Our purpose rather is, to warn from the danger, than to prompt to the imitation of his example. He is a meteor in the literary sky, not altogether of benign or prosperous portent, attaining, in his erratic course, some periods of dangerous and ominous conjunction. It may not be unconstructive to show how in some respects this energetic and masterly writer exercises a pernicious influence over the taste and thoughts of his time; and his real powers are so great, and his genius so brilliant and uncommon, that it is all the more our part, as watchful guardians of the public, to point out and condemn his eccentricities when hurtful or absurd.

Carlyle's faults, as an author, then, seem to resolve themselves into two great deadly sins, quite heinous enough of themselves, and committed with sufficient perseverance and deliberation to have utterly overwhelmed any ordinary man: one is a fault of manner, the other of substance, and both of infinitely pernicious tendency on the vast multitude of his readers.

The character of Carlyle's manner is eminently eccentric—at least such is the mild term by which some would characterize it. The strange involution of his sentences—the unlicensed word-coining of his language, have passed, in a too indulgent age, as peculiarity or oddness. But we venture to give it a more just, if not a more civil epithet. The vice of his writings is the crying evil of the day—the unpardonable offence of affectation.

Mere quaintness or peculiarity of style is not always a fault—and sometimes gives point and raciness to an author. There are men who cannot think but in a singular idiom of their own, and their language borrows the eccentricity of their thoughts. One would not wish old Burton to speak otherwise in his *Anatomy of Melancholy*, and Bunyan's *Pilgrim* would lose half its charm, done into smoother English. But the true secret of their manner, consists in the very quality in which Mr. Carlyle is so eminently deficient—simplicity. These authors travelled by a path of their own; but they did not, of set purpose, desert the highway, and seek out the roughest rocks and rudest briars to scramble through. They are quaint, but they do not strive after quaintness. In writing, they only transfer their thoughts, speaking their own vernacular tongue, such as it is; and without the endeavour—the wretched endeavour—to write a jargon, unlike the speech of any civilized race. The difference between them and our author, is simply this, that he is extravagant by design, and they are quaint by nature—the grand distinction, in every

sphere of life, between simplicity and affectation. To find a man perpetually making a manner, and thinking great things of his own peculiarities in address, is as insufferable in authorship as in society—and as it is a proof of want of breeding in the one case, so it is sure evidence of undignified vanity in the other.

If our author really, by nature, could only write, speak, or think, in this most artificial compost, of which the English language bears but an unworthy proportion to the other elements, one might forget his style in the startling nature of his matter, and admire and applaud the glowing conception, vigour of intellect, and the eloquence, sometimes reaching the sublime, which have given character and fame to his writings. But the peculiarity is not of nature, but of depraved and vitiated taste, and misdirected conceit. His earlier efforts, which we find in his collected Essays, were good, vigorous, English compositions, perfectly simple, and perfectly intelligible, marked by an agreeable and graphic power of description, and a vein of manly humour—sometimes even of wit. They want, perhaps, the boldness, as well as the finish of maturer authorship, but they have merit enough to indicate, not only the powers of an original and comprehensive mind, but also complete command over the language. It is not the want of power, but the want of will to write purely, which has betrayed him into his present wilderness of words. Tracing his progress from his first contributions to the *Edinburgh Review*, down to the last work upon our list, the cloud of affectation visibly thickens upon him, until at last, while his genius, perhaps, is burning brighter than ever, its rays come struggling, distorted, unnatural, and dim, through the marvellous medium of words—it cannot be called language—in which he chooses to be enveloped.

To the students of Carlyle, for whom we write, to give instances is quite unnecessary. They know it—and many of his zealous admirers, think it, as he does, his greatest and chiefest pride. But just to show our less informed readers what the unhallowed jargon is in which he pleases—we had almost said, presumes—to speak to English ears, let us instance the following passage from his Introduction to *Cromwell's Letters* :—

“But alas! exclaims he elsewhere, getting his eye on the real nucleus of the matter, what is it, all this Rushworthian, inarticulate rubbish continued, in its ghastly dim twilight, with its haggard wrecks and pale shadows; what is it, but the common kingdom of death? This is what we call death, this mouldering dumb wilderness of things once alive. Behold here the final evanescence of formed human things; they had form, but they are changing into sheer formlessness; ancient human speech itself has sunk into unintelligible maundering. This is the collapse—the etiolation of human features into mouldy

blank ; dissolution ; progress towards utter silence and disappearance ; disastrous ever-deepening dusk of gods and men !—Why has the living ventured thither, down from the cheerful light, across the Lethe-swamps, and Tartarean Phlegethons, onwards to these baleful halls of Dis and the three-headed dog ? Some destiny drives him. It is his sins, I suppose,—perhaps it is his love, strong as that of Orpheus for the lost Eurydice, and likely to have no better issue” !!

This frantic congregation of words may have a meaning, as every thing he writes has ; but for all practical purposes it might as well have none. Unless the encumbered sense is searched for with more diligence than any author is entitled to exact from his readers, they might as usefully study the incoherent ramblings of a lunatic. It is mere impertinence in composition to keep the public groping and struggling after the writer’s train of thought, through a mass of language, thrown disjointedly together, where, if it be worth expressing at all, there can be no difficulty in expressing it intelligibly and simply.

We have the less tolerance or patience for this wretched vice of style, that it is a defect far too prevalent among writers of the present day, and not only debases and deforms genius, otherwise great, but threatens to injure, seriously and permanently, the purity of our language. Mere mannerism is, perhaps, a fault into which practice leads all men. Each has his own style of touch—his own hand-writing. But that mannerism, which has affectation for its development, and vanity for its source—which glories in, and strives after the peculiarities, to avoid which is the object and endeavour of the finished artist, is the great curse of our modern literature. Bentham, for instance, was a mannerist to such an extent, that his French translator is far more intelligible than the English original. But his mannerism was not affectation, but sprung directly from the habits of his mind. His object, unlike our author’s, was really and honestly to express, in words which he thought the simplest and clearest, the principle or position he wished to enforce. He failed in this, chiefly because his logic was too close for his command of language. Rabelais rioted in words with as little restraint as Carlyle, but in the hearty laughter-loving enjoyment which tinges every page of his works, there is not a vestige of affectation ; his grotesque style being used on all occasions to assist and give point to his meaning. But the *affecters* of mannerism love it for its own sake ; and in modern times many a brilliant genius, besides our author, has sacrificed his powers to this unfortunate weakness. The simplicity of Wordsworth—the mysticism of Coleridge—were mere affectation ; and what exuberant power and inborn melody of soul, did it not in their case fetter and confine ! There could not be a better illustration of the fault than Wordsworth. With poetical powers per-

haps more genuine and pure than any of his contemporaries, and capable of reaching any height of allowed freedom and expansion, he was the absolute slave of affected simplicity. *Real* simplicity he had none. On the contrary, his warmest admirers must admit that he was, of all poets, the most studiously artificial in his manner and the structure of his verse. But that simplicity which he had not, he strove after—attaining, as he thought a quality, which, like the plumes of the butterfly, was destroyed by the effort to snatch it. Another eminent writer, with powers of a very remarkable order, is, we are sorry to see, sinking below his naturally high level by the same fault. We mean Mr. Dickens. His *Pickwick Papers*, like Carlyle's early works, although coloured by a ground-tint of humour, were good racy English. But the demon of affectation seems now to have taken undisputed possession of his style; and unless he make a vigorous and determined effort, and that speedily, against the obtrusive fiend, he will end in mediocrity a literary career, begun more brightly and advanced more rapidly than that of any writer of the day.

We may be told that Carlyle's style is not really affected—that it is only Germanized—that much study of German has not made him mad exactly, but so impressed the form and manner of German authorship on his mind, that he cannot, if he would, either think or write otherwise. But—to write after the fashion of lawyers—this plea of intoxication—of having drunk too deeply at Teutonic springs, only aggravates the offence; and we are glad of an opportunity of speaking our mind on a subject which has never, we think, received sufficient consideration in English criticism.

It must strike every one, that if the affectation of peculiarity is a crime against pure composition, the affectation of the peculiarities of another is infinitely more reprehensible and unworthy. Imitators of all degrees are more or less a servile race; and we cannot but consider it a disgrace and degradation to any author to prefer making his style a translation from a foreign language, to forming it on the pure model of his own. Such a writer may think powerfully, and his style may be striking and his thoughts original; but he who endeavours to write one language in the idiom of another, necessarily produces a monster. The human head on the horse's neck was not a more wanton exercise of the artist's license—

“Credite Pisones, isti tabulæ fore librum
Persimilem, cujus, velut ægri somnia, vana
Finguntur species.”

No doubt Mr. Carlyle views this matter differently. He perhaps believes that he is capable of remodelling the English lan-

guage on his German standard ; and it is probably this rather complacent belief that has induced a man of his native power to renounce so completely all pretensions to purity or scientific correctness in composition. This, however, is, we need not say, a consummation which, however desirable, is beyond Mr. Carlyle's power, and which, were it ever so practicable, would be the deepest misfortune our literature could sustain.

Independently of the scientific offence of which Mr. Carlyle is so conspicuously guilty, in clothing German thoughts and words in an English dress, there are more immediate practical errors involved in the principles of his style. We, of course, do not and cannot depreciate that noble language, the powers and capabilities of which were too long unknown to Europe, and even imperfectly developed among the Germans themselves. Nor, if it be brought to a scientific comparison, are we at all disposed to deny that it is a more copious, more methodical, and more elastic language than our own. Its grammar is undoubtedly more complete than that of any language now spoken in Europe, and it has, therefore, very great facilities for expressing shades and distinctions, whether material or intellectual. As to the authors of Germany, although perhaps we should not place Goethe and Schiller in the altitude absolutely celestial, in which our author regards them, we grant them cheerfully their exalted rank among the lights of the world, and demigods of fame. Nor has the literature of Germany been without a wholesome influence on our own ; as it has purified it from French frippery, and tended much to recall, if it has not inspired, its vigour—for unquestionably the genius of German literature is far more genuine and healthy than that of France ever was. All these considerations have justly brought the language within the ordinary range of education, and have made it the worthy subject of research and study among men of letters. For ourselves, we most cheerfully render it our humble tribute of gratitude and admiration.

But when, not satisfied with this, the ardent apostle of German literature will insist on engrafting it on our own, and with its idioms, its peculiarities of thought, we not only demur but recalcitrate. He forgets that the literature of a country is always peculiarly adapted to the people who speak its language, and that it is not only better understood, but often differently understood by those for whom it is written than by foreigners. The high-flown epithets of oriental conversation sound extravagant and ridiculous in our ears ; yet they have no such effect on the mind of the native, because they really do not import the literal idea they express. Now, rightly to understand the full meaning and effect of German literature, it is necessary to be imbued, to a certain extent, with the national character of the country, for

that which may be truly forcible, touching, witty, to German ears, may be weak, laughable, or dull in those of England.

As an illustration, we take an example which has often struck us. There is a marked distinction between the British and the German sense of the ridiculous. The German student will expire with diversion over what we should consider the most miserable conceits, and *jeux de mots* of the most stupid and far-fetched description. We never read or heard a really witty saying of a German, and a Joe Miller in that language would, to our humble sense, be an emporium of dulness. Yet, to the German mind, it would be quite as funny, as if it affected us with laughter, and not with sleep. Now, Mr. Carlyle, who, as we formerly said, has a good manly vein of British humour, and can say a smart thing very well if he chooses, condescends to stuff his writings full of those German conceits which no English reader can regard with anything but contempt. For instance, here is a truly German witticism :—

“The apotheosis of Beau Brummel has marred many a pretty youth; landed him not at any *goal* where oak garlands, earned by faithful labour, carry men to the immortal gods; but, by a fatal inversion, at the King’s Bench *gaol*,” &c..

The most wretched punster labouring through a dinner party, never said anything more stupid. Again, in another of his essays, he speaks of the time when *kenning* and *can-ing* were the same; the precise meaning of which good saying we have never been able to discover. Then, if he once gets hold of one of these commonplace *mots*, he never gives it rest. On Thurtell’s trial, one of the witnesses said that he considered him respectable because he kept a gig; and accordingly mankind has been divided into noblemen, gentlemen, and gigmen; a thing pardonable enough to say once; but not very brilliant, even when first produced. Now, Carlyle drives this gig through all his writings; it is always certain to turn suddenly on us, round some unexpected corner. To enumerate the different occasions on which he dresses up the stale conceit would be impossible; we counted it six several times in one of his little volumes of essays; and so firmly were we satisfied that it was too vivid and fresh in Mr. Carlyle’s mind to be allowed to escape, that we were on the look-out, when turning over the leaves of “*Oliver Cromwell*,” watching for the well-known vehicle. Nor were we mistaken. On it came, like a phantom chariot, before we had travelled through eighty pages, with no less an occupant than the Infanta of Spain, of whom he says, that she had come “*riding in such a gig of respectability as never was seen since Phaeton’s sun-chariot took the road*,”—no honest English soul would have anything to do with her.”—(Int. p. 73.)

Now, these specimens illustrate, on a small scale, the general error into which Mr. Carlyle has fallen. The *goal* and the *gaol*—*kenning* and *can-ing*, and the gig of respectability itself may have in them qualities well suited to delight and exhilarate the German mind; but they are not suited for our latitude or temperament, and produce no effect on us, but weariness or disgust. To a far greater degree does this operate in the general tone of sentiment, or rather sentimental expression, which runs through Mr. Carlyle's works. The Germans are a peculiar people, in the turn and cast of their thoughts. They are gentle, dreamy, and transcendental, fond of minute distinctions and abstruse abstractions, and it is the habit of their mind to conceive of them, and apprehend them easily and readily. Thus it is delight and not labour to them to follow through their peculiarities of style the true meaning and intent of their authors, which is not obscured but lightened by the figures and ideal personages and entities which start up to illustrate it. But the genius of the English mind is more simple, and, as we think it, more solid and real. With the world of metaphysical subtleties in which the German delights to dwell, our countrymen have little sympathy; and, therefore, it is unrequiting toil to the English reader to spell through these long paragraphs, disjointed images, abrupt apostrophes, little words with large letters, and all the rest of the German armoury. The incongruity is just as great as if a man were gravely to sit down at an English dinner-table, and to converse in the precise phrases, duly rendered into English, of a Chinese mandarin.

Herein, then, do we think lies the essential faultiness, the error in philosophy, as well as in taste, of the writers of Germanized English. They forget how completely the peculiarities and modes of national literature are consonant to the national mind; and how completely they may be dissonant to the mind of another nation. This is not the true use to which foreign learning—the knowledge of the literature of other lands—should be turned. What a chaos would the republic of letters be,—what a Babel of unintelligible sounds, if each, like our author, were to speak in the tongue of the other.—Germans borrowing the idiom of the French, and France arraying her gay and sparkling language in the sombre dress of England? What a contrast do our truly learned authors present to this affectation of a foreign dialect! Look at Gibbon—formal rather, and florid in his style—yet he, to whom the resources of all ages seemed to lie open, was not unambitious of the praise of a great master in English composition. Or look at Bolingbroke, the greatest and purest writer, perhaps, by whom the language was ever used; yet a man whose prodigious memory and thorough knowledge of literature, men and manners, is, without disparagement far above any to which Mr. Carlyle can

pretend. But his erudition serves not to corrupt but to embellish his style. He infuses not the outer rind but the inner spirit of his reading into his works; and is all the more thoroughly master of his own language, that he is so conversant with those of Europe and the ancients. While, therefore, we think like Englishmen, let our authors write English. Carlyle himself places Shakspeare in a niche somewhat higher than Goethe. Yet Shakspeare wrote his own vernacular English, unwitting, probably, of the existence even of the mighty engine which Goethe afterwards wielded. But what would Shakspeare have been, if scorning the native strength and melody of the language which he had heard on the banks of the Avon from his youth, he had wasted his strong and manly powers on a half-intelligible jargon—a hybrid between England and the Continent. Nay, would Goethe himself, or any great man, however enthusiastic his admiration for a foreign language, ever debase his genius to such mongrel composition as is the delight and disgrace of Mr. Carlyle? In his case the offence is all the worse, that his mind is not by nature cast in a German mould; he has much more of Saxon rough simplicity than of German sentiment about him; he thinks closely, reasons logically, and can write nervously—hates pretence, and loves to strip the mask from delusion and hypocrisy. If he would only discard the vanity of writing like a German, he might write better than most Englishmen.

In expressing our opinion thus plainly of Mr. Carlyle's style, we must not be understood to be insensible to its merits, or to undervalue the qualities for effect, which it undoubtedly possesses. But we do not think it at all incumbent on us to pronounce any eulogium on it, even where it might seem to deserve it, and that for two very sufficient reasons. First, because it is radically false in taste, and vicious in system, and we could no more conscientiously hold it up to admiration for its partial merits, than a judge, in passing sentence, would praise a highwayman for his bravery or honour. By giving it the sanction of his high name and undoubted genius, he has led away many from the "well of English undefiled" in search of what they are induced to believe a more elevated and expressive style. And secondly, because we fear he is becoming more and more hardened in his offences. Some of his works show him capable of better things. But his last publication on Cromwell, is so utterly and scandalously vicious, as entirely to overset any relencings of nature towards him. We had fondly hoped that "aiblins," "he wad tak a thocht and mend." But alas! what can be expected or hoped from him, who ends his book, on so great a theme, thus—

"The genius of England no longer soars sunward, world-defiant,

like an eagle through the storms, 'renewing her mighty youth,' as John Milton saw her do; the genius of England, much liker a greedy ostrich intent on provender, and a whole skin mainly, stands with its other extremity sunward, with its ostrich-head stuck into the readiest bush of old church-tippets, king-cloaks, or what other 'sheltering fallacy' there may be, and so awaits the issue. The issue has been slow, but it is now seen to have been inevitable. No ostrich, intent on gross terrene provender, and sticking its head into fallacies, but will be awakened one day in a terrible *a-posteriori* manner, if not otherwise. Awake before it come to that; gods and men bid us awake," &c.!

The case is hopeless. He is a beacon to be placed like buoys upon the Goodwin Sands; a warning to all who navigate these seas. If in any measure we may have assisted to prevent future shipwrecks on the same shoals, we shall consider our time and indignation not thrown away.

So much for Mr. Carlyle's faults of manner. We said there was another offence chargeable against him, and that not of manner merely, but of substance also. This is a more serious subject, and one to be more gravely treated; for the charge we mean to bring is one we should be sorry to make against any one on slight grounds, and yet one in which the public are most especially concerned. It is to the religious tendency of his writings that we allude.

No man, we believe, would recoil with more unfeigned horror from the charge of want of, or hostility to, religion, than Mr. Carlyle himself. In some respects justly. He is a man subject by nature to a strong access or impulse of the religious feeling. Phrenologists would say that veneration, or adoration, was strongly developed in his character. Few writers evince more strongly the influence of the natural religious emotions; and it is a subject on which he rather has pleasure in dwelling and expatiating. Not only so, but these emotions themselves have so strong a tendency, at times, in the right direction, that it is not without repugnance that we bring ourselves to speak as strongly on the subject as it clearly calls for. For instance, the following passage from his *Essays*, goes at once home to our sympathies: -

"Honour to all the brave and true; everlasting honour to brave old Knox, one of the truest of the true! That, in the moment while he and his cause, amid civil broils, in convulsion and confusion, were still but struggling for life, he sent the schoolmaster forth to all corners, and said, 'let the people be taught;' this is but one, and indeed an inevitable and comparatively inconsiderable item in his great message to men. His message, in its true compass, was, 'let men know that they are men, created by God, responsible to God; who work in any meanest moment of time what will last through eternity.' It is

verily a great message. Not ploughing and hammering machines, not patent digesters (never so ornamental) to digest the produce of these; no, in nowise born slaves, neither of their fellow-men, nor of their own appetites: but men! This great message Knox did deliver, with a man's voice and strength, and found a people to believe him." —*Essays*, vol. v. p. 255.

Now, this, as far as it goes, is heartfelt and earnest. Still more, in his "Sketches of Knox and Luther, in his Hero-Worship," and in "The Letters and Speeches of Cromwell," does the same spirit break out and expand; indeed, to such a degree does he seem to enter into the great religious movements of the sixteenth and seventeenth centuries, and so thoroughly to appreciate the power of godliness as a real, active, inducing, engrossing element of conduct, that our foregone conclusion stood half-disarmed; and we inwardly thought, as well as hoped, that our criticism concerned his writings more than their author.

Still, we should be eminently wanting in our duty, were we to omit, in this estimate of his merits as a public instructor, the religious tendency of his writings—the more especially as that is a character which he chiefly affects. It is much his habit and mood to preach, *ex cathedra*, on the highest and most sacred destinies of man. There is no exertion he so much loves as to penetrate, or try to penetrate, the recesses of man's desires, affections, and pursuits; and he sneers at their emptiness or falseness, and declaims against their errors, with the authority and air of an acknowledged monitor. Shall we not, then, inquire if the oracle be well inspired?

To speak honestly, Carlyle would be a far less dangerous writer to the cause of religion, if he omitted the subject altogether. The sneers of an acknowledged sceptic carry their own antidote along with them—the rattle of the snake forewarns us of his fang. One may read with comparative impunity the laboured incredulity of Gibbon; for the "believe nothing" principle of the author betrays itself throughout. But not so with Carlyle. His religious emotions not only play round the head, but would seem, at least, to warm his heart. He stirs up, with much warmth and glowing honesty, the devotional affection in the mind of the reader; and then, after all, when he has shown, in his own way, that all is vanity, and derided, with quiet sneer, the ambition, money-making, and gig-respectability, of the world—what, after all, is his chief end of man? what the object with which he would fill the void, aching, restless heart? Why, nothing better than a sort of intellectual pantheism. No higher—scarce, indeed, so high, as the ancients reached; below the immortal musings of Cicero, or the choral inspirations of Greek tragedy. His religion is truly a man worship—a homage ren-

dered to the godlike principles of our nature; and with him the power by which a strong mind ascends over the weak, is in that man the power of a god. Hence his *hero-worship*, an enthusiasm extravagantly and profanely exalted into a system and a creed, in which end all his speculations on man's destiny—all his admonitions—all his ironical warnings. Let him speak for himself.

"There is much lying yet undeveloped in the love of Boswell for Johnson,—a cheering proof, in a time which else utterly wanted, and still wants such, that living wisdom is quite infinitely precious to man—is the symbol of the godlike to him, which even weak eyes may discern; that loyalty, discipleship, all that was ever meant by hero-worship, lives perennially in the human bosom, and waits, even in these dead days, only for occasions to unfold it, and inspire all men with it, and again make the world alive.

"Veneration of great men is perennial in the nature of man; this, in all times, especially in these, is one of the blesseddest facts predicable of him. In all times, even in these seemingly so disobedient times, it remains a blessed fact, so cunningly has nature ordered it, that *whatsoever man ought to obey, he cannot but obey*. Show the dullest clodpole, show the haughtiest featherhead, that a soul higher than himself is actually here; were his knees stiffened into brass, he must down and worship. So it has been written; and may be cited and repeated till known to all. Understand it well, this of 'hero-worship' was the primary creed, and has intrinsically been the secondary and tertiary, and will be the ultimate and final creed of mankind; indestructible, changing in shape, but in essence unchangeable; *whereon politics, religions, loyalties, and all highest human interests, have been, and can be built, as on a rock that will endure while man endures*. Such is hero-worship—so much lies in that, our inborn, sincere love of great men!"—*Essays*, vol. v. p. 232.

"Worship of a hero is transcendent admiration of a great man. I say, great men are still admirable; I say, *there is, at bottom, nothing else admirable!*"—*On Hero-Worship*, p. 17.

"We all love great men; love, venerate, and bow down submissive before great men: *nay, can we honestly bow down to any thing else?*"—P. 23.

"*The most precious gift that Heaven can give to the earth, a man of genius, as we call it—the soul of a man actually sent down from the skies with a god's message to us.*"—P. 67.

"*No fact that ever dwelt honestly as true in the heart of man, but was an honest insight into God's truth on man's part, and has an essential truth in it, which endures through all changes, an everlasting possession for us all.*"—P. 188.

"At first view, it might seem as if Protestantism were entirely destructive to this that we call hero-worship, and represent as the *basis of all possible good, religious or social, for mankind.*"—P. 194.

These scattered sentences indicate the general opinion inculcated by him on this head.

We have done our best, in our study of our author, to come at the precise idea involved in this *hero-worship* theory, not, we fairly own, with very satisfactory success; for, as he announces it, we doubt if it be very susceptible of precision. He would probably say, that the true knowledge of it can only be known to, and perceived by, the refined eye that can gaze like the eagle's on the unclouded sun; and that we ordinary mortals pass and repass daily the great treasure of life, without having the privilege to discern it. This, and much rhapsody of the same kind, is more easily said than reduced within the just limits of sense or reason. As one of the multitude—one of the vast family for whom, assuredly, religion was intended—we wish to know exactly what God, or what worship he preaches; by what course of logic he, professing Christianity, deduces from the inspired Word the doctrine he loves to propound, by so strange a name, and in so unaccustomed a dress.

If all our author means by hero-worship—which he exalts, in such glowing phrase, as the prime end and object of our being—were merely to express, in rather hyperbolic phrase, our natural reverence for the noble and the good, he would, after all, but grovel at the bottom of the ladder, and see no farther, and feel no surer, with all his imagined light, than the most darkened of Pagan inquirers after truth. For if man, in the ruder ages, deified the grosser and coarser qualities, and worshipped those who excelled in them as gods, it needed not the light of revelation, or any addition to the educated sense, to perceive the folly and absurdity of such *hero-culture*, nor to point out, more or less dimly, the diviner spark which resided within the corrupted clay. The ancient philosophers could discern and reverence those purer aspirations of the soul, and recognize them also as emanations from a heavenly source. So that, if this be all that is implied in Mr. Carlyle's religion, it may be sufficiently true as far as it goes, but it did not require so many emphatic words to announce it to the world. But this is far short of our author's idea. He means to tell us, if we rightly understand his language, that not only are there qualities in man which are venerable or admirable in themselves, but that these qualities *in the man* are worthy objects of adoration, and that the *man himself* is so, in respect of the quality residing within him; not that his worship is the vulgar one of setting up idols in a temple, and offering vain oblations, but he thinks that the religious principle in man finds fitting and sufficient exercise and fulfilment in the contemplation of what is great and magnificent in his fellow-man. The God whom he would adore is the abstract sense or impersonation of such qualities; and the homage paid by the weaker to the stronger mind, is essentially, as he thinks, the religious

obedience of the soul. In Christianity he sees nothing but a perfect model of the man worthy of adoration ; and he divides his homage among all in whom the adorable quality may seem to reside.

To say nothing for the moment of higher views, this new Pantheon is truly one at which the heathen philosophers would have looked with contempt. They saw what was noble in man ; but they saw also how man had debased, degraded, quenched it. So far from seeing, as our author says, that " Nature had so willed it, that whatever man ought to obey, man must obey," they saw the very reverse—that the law which they could not but reverence, they could not obey ; that the diviner spirit within them kept up an unequal warfare with the affections and corruptions of the flesh. "*Video meliora proboque, deteriora sequor,*" was the true and just language of the ancient philosophy of Greece and Rome. This did not, and could not, lead them to man or hero-worship ; on the contrary, it led them to reject, as empty fables, the established congregation of divinities ; for they were keenly alive to the contradiction of giving homage or obedience of soul to imperfection or impurity. "What, then," was the natural inquiry, "are there no gods?" "*Plerique deos esse dixerunt,—dubitare se Protagoras : nullos esse omnino Diagoras Melius et Theodorus Cyrenaicus putaverunt*—(Cic. de Nat. Deor. 1.) Then, darkly resolving the existence of a Deity and a future state, from the imperfection of our nature and the inequality of our condition, the Platonist goes on to search out the attributes of the one, and the nature and requisites of the other, until his stream of thought is absorbed in the sands of bewilderment, and he "finds no end, in devious mazes lost."

But with what scorn would such a sage have heard our author propound, that the power of one man's mind over another's was that of a divinity—a hero—to be worshipped!—when he saw, in the world around, how the recklessness of the strong mind daily triumphed over the uneasy conscience of the weak—and still more, how the fierce contending passions hourly trampled down the ineffectual pleading of conscience within the soul, making the ascendancy of the mind of man over his fellows more that of a demon than of a god ; and even, where the purer sense had acquired a purer sway, how uncertain, how wavering, how corrupt, how ungodlike, how insufficient for that heavenly light, by the undying and unobscured refulgence of which even the unenlightened soul feels that its pathway should be guided !

Were we therefore to take this hero-worship to task on no higher grounds, we think it offensive to natural, as well as adverse to revealed religion. An Augustus sits on the world's throne, and poets sing the advent of Saturnian days, and paint

him quaffing nectar with purple-lips among the gods ; while all the while the object of their flattery is stained by every crime that can degrade man below the brutes. The people shout at the inauguration of Herod, and the worms seize their newly proclaimed god, ere their plaudits have died upon his ear. Were it not even better, one might think, to bestow man's reverence on some consecrated image, that might at least body forth and enshadow the qualities to which the devout mind turns with adoration, than to cast it away on the degraded and sin-defaced image of our Maker, which in spirit and in body attests how far it has fallen short of divinity !

It may be said we take this too literally. It is not the hero properly who is to be worshipped, but the heroic principle—the divinity within the man. But, alas, what is the heroic principle, and where does it reside ? A vivid fancy will invest a conqueror with all the attributes of generosity, courage, clemency, and the far-seeing eye of government, and year after year may have fixed its admiration on this exalted subject of idolatry, when a trifle, light as air, may tumble this *hero-god* from his pedestal, and reduce him to a mere earthly mortal. No man, it is said, is a hero to his valet—a true saying, which Mr. Carlyle may well take note of. “No,” he says, “the valet does not know the hero when he sees him.” Not so. The valet sees him to be no hero. The proverb is eminently expressive of the frailty, and weakness, and inconsistency of humanity, which an intimate acquaintance with the best and greatest is sure to expose. The man is a hero to the world, who only see him on his pedestal, in his robes of state, but the close observer discerns all the failings of a common nature—

“——’tis true, this god did shake :

Ay, and that tongue of his, that bade the Romans
Mark him, and write his speeches in their books,
Alas ! it cried, *give me some drink, Titinius,*
As a sick girl.”

As a mere enthusiasm, we think all this speculation false ; but its direct tendency as a practical system of belief is very dangerous. The mischief is not so much that our author exalts the admiration of heroes to the rank of religion, as that he brings religion down to nothing but the worship of man, or of God as displayed in man. He very carefully avoids, in his work on Hero-Worship, saying a syllable offensive on the subject of Christianity ; but it would be a very easy task to demonstrate from his opinions that all religions are alike true, and that the true religion is simply the aggregate of all. Whatever a man thinks *honestly*—is God's revealed will in him—Odin—Mahomet—are as

much God's messengers—proclaimers of truth—as Isaiah or John the Baptist—nay, as our Saviour himself. Not in the same degree, he admits, but of the same kind—an emanation from the same holiness. But, dress it in what vividness and kindliness of language he will, what a false and unstable position. What a man thinks honestly!—Why, Paul of Tarsus, yet breathing out threatenings and slaughter, thought he did God good service—thought it as honestly—with as much *hero-sincerity* as ever Luther or Knox battled for the truth. And Mr. Carlyle, speaking correctly and devoutly of religion, would have us to hold that the persecution, as much as the preaching, was a light sent from heaven. If sincerity, that is, the simple belief in its truth, be all that is required to make any religion true, then truly never was religion false. Mormonism in the West, Buddhism in the East, the human sacrifices of the Druids, the Suttée and the car of Juggernaut, were just, true, heroic inspirations from the great Author of good. Take for instance the example of Mahomet. Carlyle says he was a true prophet. He will not be convinced that so many millions for so many centuries, have believed a lie; and one is beginning to think that our author is truly a victim to Mahometan delusion. No such thing. His sketch of Mahomet is very vigorous, and, as we think, in great measure just. He regards him as an honest, earnest man in the main, subject to some delusions, but preaching down idolatry, and setting up the one God, in short establishing a sort of pseudo-Christianity. Before he is done with him, we find him exclaiming—“Alas, poor Mahomet, all that he was conscious of was a mere error, a futility and triviality, as indeed such error is!” Yet this is his true prophet—his hero—to be worshipped! So that his conception of a true prophet is, after all, nothing but an able, earnest man, working out with honest sincerity, though with many errors, futilities, and trivialities, what he believes to be true. He admits that the Koran, in so far as not a transcript of the Scriptures, is a falsehood,—that it is no inspiration of God, as Mahomet said it was, but a very dull, stupid, human book. Yet it seems no objection to his hero-God that he promulgated a lie; nor any calamity, or of any dangerous issue to the multitude of his followers, that they have for centuries believed a lie. It was preached and believed in sincerity, and, according to his creed, no more can be required.

It really needs no words to show any truly religious man how destructive all these vain philosophizings are to Evangelical reality—to the doctrine of the corruption of our nature—the renewal of the heart by grace—the redemption of our fallen race by the sacrifice for sin, and justification through faith. By our author's theory there is no reality in them but the earnestness

with which they are believed, and other doctrines, held as honestly, are just as true as they.

We have no leisure to pursue this farther, but we thought that we could not, in any fidelity, pass by in our notice of our author this delusive tendency of his writings, which is rendered doubly dangerous by the great amount of truth with which it is illustrated, and the glowing kindliness and social warmth with which it is expounded by him. We do not think Mr. Carlyle had any thought of undermining religion; but quite the reverse. He has, however, allowed himself to be carried out of his depth by a mere German fantasy—an exhalation from the fens of neology, which has led him much farther than he himself is aware. The school of Goethe is a very bad theological institute—we know none worse; for with a certain show of belief, it truly abrogates Christianity altogether, and Mr. Carlyle has a harder task than he can perform to keep his transcendental theory in any unison with his manifest personal impressions.

On a lower stage, and in a less ambitious mood, his analysis of the love of heroes has much that is natural, beautiful, and true; and we own that we never read a book with more interest than his six Lectures on Hero-worship, or found more in a book worth reading. The sketches of Mahomet, Dante, and Luther, are very masterly, and if only divorced from his theory, which adds nothing to the ornament, and only detracts from the moral, they deserve to rank very high in tone, expression, and execution.

Having now relieved ourselves of Mr. Carlyle's great cardinal sins, of manner and substance, we have no intention of parting with him in ill humour. He is no common writer, in merit or in influence, or we should not have thought his offences so important to the public. In discharging our duty of censure, we feel as one might do who has told his friend some disagreeable truth long withheld, and now that it is over, we cannot pass to the review of Cromwell's Letters, without a parting word of esteem and admiration.

Carlyle has fine, manly, poetic spirit. When he writes simply, his words breathe poetry, and even in his most overlaid writing the fine imagination will burst forth. Take for instance this passage on the death of Goethe:—

“ And yet, when the inanimate, material sun has sunk and disappeared, it will happen that we stand to gaze into the still glowing west, and there rise great, pale, motionless clouds, like coulisses or curtains, to close the flame-theatre within; and then, in that death-pause of the day, an unspeakable feeling will come over us; it is as if the poor sounds of time, those hammerings of tired labour on his anvils, those voices of simple men had become awful and supernatural; as if in his-

tening, we could hear them 'mingle with the ever-pealing tone of old eternity.' In such moments the secrets of life lie open to us; mysterious things flit over the soul; life itself seems holier, wonderful, and fearful. How much more when our sunset was of a living sun, and its bright countenance and shining return to us, not on the morrow, but 'no more again, at all, for ever.'—*Essays*, vol. iv. p. 116..

This is finely conceived, and expressed both with power and music.

We might easily add to the instances, as, indeed, every page of his writings teems with them. But his great—his greatest praise—the crowning redeeming point of his writings is the fearless, kindly honesty which pervades all his works. He has a warm heart to his fellow-men, and a warm wish for their happiness; and whether the object be always discreetly or wisely pursued, it is pursued in the main with fervour and singleness. There is no meanness or subserviency about himself, and no toleration for them in others; but, on the contrary, all that is truly noble, real, and majestic, in man's affections or acts, finds an enthusiastic welcome in his pages. There is a glow of health about his tone of reflection, and a manliness and independent vigour in the whole cast of his mind, which leave behind on his reader a feeling of friendliness and respect for the author, and a conviction that he is a man who has the courage to think fearlessly and honestly, and who is not ashamed of his thoughts.

Of his works, that on the French Revolution, is the most ambitious, and is, perhaps, the most striking and the best. It contains some very graphic painting, and, in conception and originality, is of very singular merit. But we are compelled to pass over this, and many other topics, in order to complete the task we have set ourselves. If we shall appear, in this general analysis of our author, to have blamed too indiscriminately, and praised too sparingly, our readers may rest assured that we have not done so from any want of hearty admiration of his genius, but from the sense that the faults we censure are all the more dangerous, from the very brilliancy by which they are gilded and adorned.

And now, after this lengthened preamble, which resembles a long avenue to an inconsiderable domain, we come to speak, more shortly and cursorily than the subject deserves, of Mr. Carlyle's last publication—the *Letters and Speeches of Oliver Cromwell*—a very curious, able, and characteristic work.

Our author seems to have had floating in his head, and not yet to have discarded, a design of writing the life of Oliver Cromwell. This, however, is not intended as a biography, but rather as prefatory to an undertaking of this nature. His design is simply to place before the public, in as pure and natural a dress

as possible, the words, written and spoken by Cromwell, as far as these have been preserved—what he calls the “authentic utterances of the man Oliver himself.” These Letters and Speeches, he explains that he has gathered from far and near, cleared them from masses of superincumbent rubbish, and professes no more, in these volumes, than to have set before the reader Cromwell’s authentic words, with only as much of annotation as might be necessary to make them intelligible. He has merely, he says, “washed them into legibility.” But out of these documents themselves, and his running commentary on them, and contemporaneous events, he has in effect woven a most speaking and vivid history; a narrative that transports one to the times of which he writes, and makes the reader dwell familiarly with the men who played their part upon the scene. We doubt if he has left over much that is essential or interesting in his hero, for a more professed biography.

It was an endeavour of our author, deserving well of his country, and most opportunely timed, to resuscitate the memory of our great commoner. While other men are raising from their graves the skeletons of ancient falsehood and error, and conjuring up the shades of departed delusions—in these days, when the Reformation is again stigmatized as a crime, and Laud is canonized as a saint—it was fitting and timely that one should evoke once more the mighty spirit of the Puritan, before whose frown they trembled and vanished. Blind Royalist revenge disturbed the bones of the regicide in their quiet grave, and scattered them all vainly to the winds. The present work is a sort of retributive moral exhumation; an attempt to dig away the mass of prejudice, falsehood, and forgetfulness, under which Cromwell’s memory has for two centuries been buried, and to embalm it to all posterity. The conception, at least, is worthy and magnificent, whatever praise or blame the execution may challenge.

After what we have said already, we cannot trust ourselves, and it is needless, to speak of the style, language, and composition of this work. It is a caricature of the author’s exaggerations; a mass of affectation, bad taste, and vulgarisms, which have stirred our bile to such a degree that we can hardly command sufficient coolness to consider the substance of the book as it deserves. “Flunkeyism”—“Torpedo Dilettantism”—“Hide-bound Pedantry,” and such un-English, and frightful figures of speech dance like goblins through his pages. He tells us that the execution of Charles the First “*did in effect strike a damp like death through the heart of Flunkeyism universally in the world;*” and in another passage, of the Royalists shedding tears enough “*to salt the whole herring fishery.*” Nor is he contented with making ordinary use of these wretched cant words and phrases; but he

repeats them over and over again, as if they ran in his head like the fag end of a tune, which he is perpetually humming to himself. There is hardly a sentence of simply written English in his portion of these twelve hundred pages of print, and hardly one which does not inspire any reader of ordinary taste with offence and disgust. We shall say no more of this, although our words and our indignation on the subject are far from being exhausted.

The work is, farther, replete with the most transparent vanity. The self-complacency of the author shines out conspicuous, even under the sober garment of truth and reality which he professes to wear. *He* is the only gifted seer of the age. *He* alone can discern the hidden meaning of past heroisms, to which an age of flunkys and dilettantis is blind. He alone can conceive the power of religious truth, as a real life-giving principle. He, in short, has the exclusive privilege of all these mysteries, and of his good condescension he communicates what pleases him to his readers. Then all prior histories and historians are covered with utter contumely and contempt, and even writers of the days of the Commonwealth, speaking of things that passed under their own eye, are set down as fabricators or blockheads, if their notions of fact differ with our author's. The biographers of Cromwell, or historians of his time, with the exception of Forster and Guizot, whose merits are scantily acknowledged, are one and all dismissed, some as lying knaves, others as somnolent dreamers, others as very weak, well-meaning, helpless men; none being admitted even to hold their poor farthing candles to light our author on his way. He speaks of "Wooden Ludlow,"—"dull, fat Bulstrode,"—"Historical John" (Rushworth),—"Pudding-headed Hodgson,"—"Carrion Heath,"—"Dusky, tough St. John." So that the result is, that there are no voices at all worth listening to on this matter, excepting those of Oliver himself, and of another hero, not less worshipped, whom we need not name. Mr. Mark Noble, who wrote a life of Cromwell in 1782, is a theme of constant sneer and banter. On one occasion, when Mr. Noble hints that Cromwell appears, from a particular document, to be "far gone in religious enthusiasm;" Mr. Carlyle makes this rather unceremonious retort on his unconscious opponent,—

"Yes, my reverend imbecile friend, he is clearly one of those singular Christian enthusiasts who believe that they have a soul to be saved, *even as you do, my reverend imbecile friend, that you have a stomach to be satisfied; and who, likewise, astonishing to say, actually take some trouble about that. Far gone indeed, my reverend imbecile friend.*"!!!

The muse of history, if she has any self-respect, should really look after this most unruly votary.

But our candour compels us to say, notwithstanding these

egregious defects, this is a very notable performance—a book of a high class, and to be followed by great results. In spite of his faults of style, Mr. Carlyle has a singular realizing power; a pictorial conception, which gives to his descriptions a wonderful charm, in transporting his reader to the scene which he describes. In these two volumes, we live, speak, correspond with Cromwell; wander with him along the slow waters of the Ouse, contemplative, deep, and troubled; follow him, an anxious inquiring man, to the confines of that eddy of public life which was never to release him; sweep along with him, reflective, resolute, collected, in his wonderful career of arms, from the day he first drew sword for his country at Edgehill, to that on which he returned it, at Worcester, in crowning victory for ever to its sheath. Thence we pass to the uneasy pillow and public triumphs of the Protectorate, even to that solitary voice of prayer which was heard amid the howlings of the tempest, on the very eve of his dissolution. Throughout all we have the very man in bodily and mental presence before us—the man, the hour, and the place,—so that when we close the volume we conceive almost as vividly of the occurrences it speaks of, as if we ourselves had known the hero, and had acted on the ever-changing stage on which he played his eventful part.

This admirable talent, which would give life and truth-resemblance even to mere fiction, has been here used by Mr. Carlyle for a worthy object, and with the happiest result, namely, to paint a faithful picture of the great man of those times, and to show us in what were truly the aspirations which filled, and the emotions which commanded his mind, and impelled him to deeds so great and remarkable. We expect a loud outcry against our author from some quarters. John Milton, while he annihilated the literary glory of Salmasius, did not finally lay his spirit. To the worshippers of kingcraft and priestcraft—the resurrectionists of exploded heresies—this book will be bitter as wormwood. They will not endure to look at the great Puritan leader who upset their dynasty, in any but the fanatical-hypocritical light in which the succeeding Royalists have painted him. The attempt to represent him otherwise will undoubtedly call down much of the old Salmasian indignation on Mr. Carlyle's devoted head. But he can afford to stand the shock of all this noise and clamour, which will but break, like the waves of ocean, against the indisputable truth and fidelity of his portrait. He has one strong guarantee for credit with his readers, that in giving us access to these letters and speeches, he has laid open to us not results only, but the means of arriving at them, and we may judge as well as he whether his inference be true. On ourselves the effect of our perusal has been to give us, if not a new,

at least a far more consistent view of the character of that remarkable man, and we shall endeavour in the space which remains, to lay before our readers a general sketch of the more prominent lineaments of this truly national painting.

It is not at all surprising that the character of Cromwell should have hitherto met with very partial justice in history. For the twenty-eight years which succeeded his death, the restored Stuarts were of course flattered by having reproach and contumely heaped on their great adversary. They could not allow even his worn out frame to rest in its narrow bed; and it was not to be expected that his character would be dealt with more mercifully. During this period, most of his contemporaries, men who had known and understood him, had died out, and before it was safe to write honestly of him, many of the materials for doing so were lost. How ready his former adulators were to forget his past greatness, and worship the rising sun, may be well illustrated by the first volume of Dryden's *Miscellaneous Works*, in which his "Heroic stanzas on the death of Oliver Cromwell," a panegyric of ambitious flight, stands just before "*Astræa Redux*, a poem on the restoration of King Charles II." Even at the Revolution, there seemed a tacit consent to pass his memory in silence. The savour of a usurper is never sweet in the nostrils of sovereignty, and the staunchest of the Puritans could not forgive the arbitrary sway of the Protectorate, or the injuries of the outraged constitution. It can therefore surprise no one that it continued fashionable rather to disparage than to eulogize the character of Cromwell. Even in later times, when the wonderful genius of the man, and the public glories of his government shone too brightly in the eyes of the nation for prejudice to obscure, an impression unfavourable to his personal reputation had settled down on the minds of his countrymen. An age of cold formality and open scepticism shuddered with well-bred horror at one who had the likeness of a kingly sceptre in one hand, and his Bible in the other—who spoke of his duty to God as the paramount motive of public conduct, and mingled the language of State with that of Scripture. The speculation started by the infidel Hume, whether Cromwell were more fanatic or hypocrite—in other words, more fool or knave—came to be the standard criterion of his character. Fanatic or hypocrite he must have seemed to Hume, in whose eyes all religion was fanaticism or hypocrisy; and so he was written down, in an age partaking too much of the spirit, and too subservient to the influence of the doctrines of the French Academy.

This work of Mr. Carlyle's has, we think, once for all fairly extinguished this theory. Whatever may be thought of his

claims to veneration as a constitutional leader or governor, the man's character, shining transparent through the "authentic utterances" now furnished to us, can no longer be matter of doubt or debate.

These letters, then, bear strongly marked upon them the impress of complete sincerity from first to last; and unless the profession of religion be in itself hypocrisy, we are unable to discover any hypocritical tinge throughout any part of the correspondence. In every crisis—on every subject—in public dispatches, and in his most confidential letters—in his familiar billets to his own family, as well as in his letters from the Protector's throne to Blake and Mazarin, the strain is still the same—his own unworthiness—the littleness of time—the duty of doing all for God. Here we have public and private documents—some meant to meet the public eye—some which the writer never thought to pass beyond the hand they were addressed to. Some written while as yet no streak of dawning greatness, or even opportunity, could be descried in the horizon—others in the meridian of his triumphs. We are satisfied—as every one who reads dispassionately must be—that in a correspondence spread over a whole lifetime, and disclosing the secrets of the man's inmost heart, such coincidence could not be found without complete sincerity. The mask must at one time or other have slipped off and disclosed the real features, if the whole life were played behind it. We think he comes out in his correspondence free from all suspicion of indirect dealing or duplicity—without a tint of vanity or vaingloriousness—but a deep-flowing, resolute, thoughtful, practical vein breathes in every line. Whatever may be thought of his Parliamentary eloquence, this certainly is the character of his letters.

What, then, was Cromwell's real character? A very simple and intelligible one, as we think, and one very clearly elucidated in the book before us. From his early youth, he was deeply visited by a sense of his spiritual dangers, and of his responsibilities to God. Born of an ancient and wealthy family, (a fact which Mr. Carlyle puts beyond dispute,) and recalled from the University, by the early death of his father, while yet a youth, to the head of his mother's house, he had remained, from the age of nineteen until past forty years of age, before a trumpet had sounded in his ear, or even a whisper of glory had warmed his heart. A grave, melancholy, soul-disturbed man, cultivating his native acres in the Fens of Huntingdon, and only bent beyond, on securing his everlasting peace—he might, but for the inevitable call of the times, have so passed away his days, no man imagining he was aught but anxious, honest, and fiery as he seemed, and all "guiltless of his country's blood." When

as member for his native borough, he found himself first involved in the public crisis of 1640, the motive which actuated him, far above any feeling of constitutional liberty, was zeal for the truth of God, and for the acknowledgment of evangelical religion, and he showed his sincerity no less than his sagacity, when, in order to oppose the high-blood of the cavaliers, he levied his Ironsides from God-fearing men. This one feeling—this engrossing thought, followed him throughout his whole career, even to the very threshold of the throne. We are not to say, that in a course so eventful and so triumphant, promptings of human ambition, and visions of temporal glory, found no place in his heart, or failed to influence his conduct. He would have had more than human self-command if he had been deaf entirely to the voice of kingly grandeur, by which he was so loudly assailed; but it is fair to say, that the correspondence now before us discloses little of such weakness, and represents him as a man striving with great singleness of heart for the establishment of what he believed to be a government according to God's will. As an example of the grounds from which these conclusions are derived, we shall lay before our readers one or two extracts from the Letters before us, written at different periods in his career. We commence with the first letter of Cromwell which is preserved. It is a letter written before he had taken any part whatever in public life, and is in favour of a lectureship which had been established in his neighbourhood in the country. It speaks sufficiently for itself.

"To my very loving friend Mr. Storie, at the Sign of the Dog in the Royal Exchange, London: Deliver these.

"St. Ives, 11th January, 1635.

"MR. STORIE,—Amongst the catalogue of those good works which your fellow-citizens and our countrymen have done, this will not be reckoned for the least, That they have provided for the feeding of souls. Building of hospitals provides for men's bodies; to build material temples is judged a work of piety; but they that procure spiritual food, they that build up spiritual temples, they are the men truly charitable, truly pious. Such a work as this was your erecting the Lecture in our Country; in the which you placed Dr. Wells, a man of goodness and industry, and ability to do good every way; not short of any I know in England: and I am persuaded that, sithence his coming, the Lord hath by him wrought much good among us.

"It only remains now that He who first moved you to this, put you forward in the continuance thereof: it was the Lord; and therefore to Him lift we up our hearts that He would perfect it. And surely, Mr. Storie, it were a piteous thing to see a Lecture fall, in the hands of so many able and godly men, as I am persuaded the founders of this are; in these times, wherein we see they are suppressed, with too much haste and violence, by the enemies of God's Truth. Far be it that so much guilt should stick to your hands, who live in a City so

renowned for the clear shining light of the Gospel. You know, Mr. Storie, to withdraw the pay is to let fall the Lecture; for who goeth to warfare at his own cost? I beseech you therefore in the bowels of Jesus Christ, put it forward, and let the good man have his pay. The souls of God's children will bless you for it: and so shall I; and ever rest, your loving Friend in the Lord,

“OLIVER CROMWELL.”

“Commend my hearty love to Mr. Busse, Mr. Beadly, and my other good friends. I would have written to Mr. Busse; but I was loath to trouble him with a long letter, and I feared I should not receive an answer from him: from you I expect one so soon as conveniently you may. . *Vale.*”

If this be cant, it was cant for no conceivable object. At this time, at least, Oliver, in his wildest dreams, could hardly have figured to himself military honours or public power. He was an undistinguished man, living at St. Ives, and farming his grazing lands,

“on the Estate of Slepe Hall, and farmed the same for a space of some five years. How he lived at St. Ives: how he saluted men on the streets; read Bibles; sold cattle; and walked, with heavy footfall and many thoughts, through the Market Green or old narrow lanes in St. Ives, by the shore of the black Ouse River—shall be left to the reader's imagination. There is in this man talent for farming; there are thoughts enough, thoughts bounded by the Ouse River, thoughts that go beyond Eternity—and a great black sea of things that he has never yet been able to *think*.”

Our second instance finds him on the field of Marston Moor, and is written from the scene of bloodshed and of victory. It is a letter which strikes us to breathe a tone of tenderness and delicacy which we could never have expected from the rough and stern Puritan soldier. It is addressed to Colonel Walton; and his object is to inform him of the death of his son in the conflict; and we do not know, that with all the thought the most considerate friend could have given, the news could have been broken to the bereaved father in a more gentle or consolatory manner.

“5th July 1644.”

“It's our duty to sympathise in all mercies; and to praise the Lord together in chastisements or trials, that so we may sorrow together.”

Having thus given warning of some calamity to be announced, he goes on in the next paragraph to describe the victory, and then proceeds,—

“Sir, God hath taken away your eldest Son by a cannon-shot. It brake his leg. We were necessitated to have it cut off, whereof he died.

“Sir, you know my own trials this way: but the Lord supported me with this, That the Lord took him into the happiness we all pant for and live for. There is your precious child full of glory, never to

know sin or sorrow any more. He was a gallant young man, exceedingly gracious. God give you His comfort. Before his death he was so full of comfort that to Frank Russel and myself he could not express it, 'It was so great above his pain.' This he said to us. Indeed it was admirable." * * * *

"Truly he was exceedingly beloved in the army, of all that knew him. But few knew him; for he was a precious young man, fit for God. You have cause to bless the Lord. He is a glorious Saint in Heaven; wherein you ought exceedingly to rejoice. Let this drink up your sorrow; seeing these are not feigned words to comfort you, but the thing is so real and undoubted a truth. You may do all things by the strength of Christ. Seek that, and you shall easily bear your trial. Let this public mercy to the Church of God make you to forget your private sorrow. The Lord be your strength: so prays your truly faithful and loving Brother,

"OLIVER CROMWELL.

"My love to your Daughter, and my Cousin Perceval, Sister Desbrow and all friends with you."

Our third instance is to us the most remarkable letter in the whole collection, as showing not only the cool intrepidity of the man, but also exhibiting, under circumstances in which its sincerity could not be doubted, his strong faith in help and protection from above. It is written from the battle-field of Dunbar. The wily tactics of Leslie had detained the General of the Commonwealth hovering in vain for weeks round the rugged outskirts of Edinburgh. Inaccessibly posted on the Calton Hill, in a position too strong for attack, his cautious opponent could not be allured either by challenge or stratagem, to try the fortune of the field. Meanwhile, privations and disease were rapidly thinning his ranks, and at last nothing remained for it but retreat. He made the best of his way to his ships, which lay at the harbour of Dunbar, his dispirited and toil-worn troops hotly pursued by the Scottish army, now flushed with success and the hope of complete victory. If he cannot reach his ships his career is run. On the ground between what is now the village of Belhaven and Dunbar, the tents of Cromwell were pitched on that dismal night. The rain poured in torrents, and the spirit of the tempest shrieked over a strange shore and an unknown sea, from Traprain Law to the Bass, as if in fierce elegy for those who were to fall on the morrow, far from their homes. Hear how the calm voice of the unmoved and sustained soul rises above the tumult of the elements and the storms of fortune.

"To Sir Arthur Heselrig, Governor of Newcastle: These.

"Dunbar, 2d September, 1650.

"DEAR SIR,—We are upon an Engagement very difficult. The Enemy hath blocked up our way at the Pass at Copperspath, through

which we cannot get without almost a miracle. He lieth so upon the Hills that we know not how to come that way without great difficulty ; and our lying here daily consumeth our men, who fall sick beyond imagination.

" I perceive, your forces are not in a capacity for present release. Wherefore, *whatever becomes of us*, it will be well for you to get what forces you can together ; and the South to help what they can. The business nearly concerneth all Good People. If your forces had been in a readiness to have fallen upon the back of Copperspath, it might have occasioned supplies to have come to us. But the only wise God knows what is best. All shall work for Good. Our spirits are comfortable, praised be the Lord—though our present condition be as it is. And indeed we have much hope in the Lord ; of whose mercy we have had large experience.

" Indeed do you get together what forces you can against them. Send to friends in the South to help with more. Let H. Vane know what I write. *I would not make it public, lest danger should accrue thereby.* You know what use to make hereof. Let me hear from you. I rest, your servant,

" OLIVER CROMWELL."

So he wrote, in the full expectation that the-morrow might terminate his victories and his life. It was the next morning, at the first charge of the cavalry, that, as the clouds rolled away, and the sun shone out, " I heard Noll say, says Hodgson, ' Let God arise,—let his enemies be scattered ! ' " A more sublime and yet more simple war-cry than even the celebrated watchword of Napoleon from the foot of the Pyramids.

Our last instance finds him a mighty potentate, and a heart-broken, care-destroyed man. It is addressed to General Blake, at sea, and not much more than a year before the hero closed his course.

" *To General Blake, at Sea.*

" Whitehall, 10th June 1657.

" SIR,—I have received yours of — ' April last ; ' and thereby the account of the good success it hath pleased God to give you at the Canaries, in your attempt upon the King of Spain's ships in the Bay of Santa Cruz.

" The mercy therein, to us and this Commonwealth, is very signal ; both in the loss the enemy hath received, and also in the preservation of our ' own ' ships and men ;—which indeed was very wonderful ; and according to the goodness and lovingkindness of the Lord, where-with His people hath been followed in all these late revolutions ; and doth call on our part, that we should fear before Him, and still hope in His mercy.

" We cannot but take notice also how eminently it hath pleased God to make use of you in this service ; assisting you with wisdom in the conduct. and courage in the execution ' thereof ; '—and have

sent you a small jewel, as a testimony of our own and the Parliament's good acceptance of your carriage in this action. We are also informed that the officers of the fleet, and the seamen, carried themselves with much honesty and courage; and we are considering of a way to shew our acceptance thereof. In the meantime, we desire you to return our hearty thanks and acknowledgments to them.

"Thus, beseeching the Lord to continue His presence with you, I remain, your very affectionate friend,

"OLIVER P."

We know not what effect these quotations may have upon our readers; but for ourselves, we think it might be well if all in power, in the camp or the Cabinet, both wrote and acted under similar impressions.

The conclusion, therefore, that we draw is, that Cromwell's religious feelings were not only sincere, but formed the great prevailing motive of his conduct in life. It was for this at the first that he took up arms; and in this feeling, under different modifications, the secret will be found of all the great passages in his life. Thus his assumption of the power of the Protectorate, is not, as we think, to be explained on the mere hypothesis of personal ambition. We think that at that period he believed himself called to be the instrument of a great work. He saw the Parliament wasting their strength, and endangering the security of the nation, in vain disputations, while royalist intrigue was rapidly undermining their stability. He saw, on the other part, that he had the power in his own hand, and perhaps the sole power, of averting these calamities; and therefore seeing no other deliverance, he seems to have felt impelled not to cast away the opportunity which Providence seemed to have put within his grasp. There may have been in this a greater or less degree of enthusiasm, or self-delusion; nor, perhaps, was he unwilling to regard that as a duty to which his ambition or inclination prompted. But, even in his most private letters, written during the period of the Protectorate, there is a deep cast of pain and care, as if he would fain throw off his harness, and be free and at rest once more, if his duty to the State did not require his continued exertions; and we find nothing in any of his correspondence like complacency or even comfort in his wonderful elevation.

In this book of Carlyle's, however, Cromwell is of course a hero, in whom his very faults are merits, and only thought to be faults, because the dull world and he are at issue on the subject. The worst feature in the work is, that he not only passes over, without a word of disapprobation, but rather seems to extol and admire the radical defect in Cromwell's

character, namely, his disregard of the principles of liberty: which comes out quite as clearly in this correspondence, as does his religious sincerity. It was zeal for Protestant truth, and not for constitutional right, which impelled him to join in the wars of the Commonwealth; and never, throughout his whole career, does he seem to have had any sound appreciation of the principles of popular government. Thus the Protectorate, commenced in military usurpation, continued a system of unmingled arbitrary power, swayed, indeed, by a strong hand, with justice and clemency, but still owing what liberty it possessed only to the good pleasure of the ruler. Undoubtedly it is a singular proof of the vigour and clear sight of the man, that though his power was usurped and arbitrary, his rule in all the three kingdoms was beneficent and salutary. Even in Scotland, we appear to have been surprised with the spectacle of impartial justice in the administration of the law, and to have set it down, in those days of clanship, to the circumstance that the judges of the usurper were a set of "kinless loons."

All this, however, did not atone in the eyes of the lovers of liberty in those days, who had spent blood and treasure for its preservation, for the utter subversion of constitutional government which accompanied the power of the Protector; and it is not without a feeling approaching to indignation, that we find Mr. Carlyle deliberately treating those who would blame the despotism of his reign as "hide-bound pedants," still enveloped in the mists of prejudice, and unable to discern that all the hero did was, and must have been, rightly done. No doubt Oliver had ticklish materials to deal with, and he cut the knot with his sword, as a soldier might be expected to do; but although it might not be unnatural that he should resort to a course so unencumbered, such a plea is only that which might be raised for the destruction of the liberties of man by any tyrant who ever ruled.

In short, Cromwell's original desire was evidently to frame what Carlyle calls a theocracy—to establish a Government in which the fear of God should be openly acknowledged as a paramount rule of action. He either felt, or persuaded himself that he felt, this prevalent motive throughout. He cashiered the Rump Parliament, avowedly on the ground of their irreligious and dissolute lives. He assumed the Protectorate because he found, that amid the vain harangues of Parliament, the reign of the "malignant" Stuarts would recommence, and even his coquettings with the name of King, may have been justified to his own mind, by the more sacred nature of the office.

Of Cromwell's Speeches we have no space or leisure to speak.

Independently of any intention to mystify, he was plainly a man whose words did not come readily in public, and who laboured painfully to express even the simplest sentiment. He possessed the peculiarity, not uncommon, of writing with great nerve and precision, while his public speaking was singularly confused and unintelligible—a characteristic which is, to a certain extent, shared by the great General of our own times, whose oratory is far from equalling the lucid distinctness of his military dispatches. We must here take occasion to remark, that nothing could possibly be in worse taste than the interjectional ejaculations of Mr. Carlyle, which he throws in to assist the sturdy confusion of Oliver himself. If he had any regard for the unity of the picture, he would hardly have introduced such a dance of satyrs in a grave historical painting. The reader might have derived some advantage in following the meaning of the speaker from Mr. Carlyle's editorial assistance, if he had conveyed it in intelligible language in the form of notes, but as it is, the contrast between his hero and himself is too great, either for gravity or temper.

The blackest portion of Cromwell's life, and the deepest stain upon his character, is treated by Mr. Carlyle in a strain of unbecoming levity and indifference. Cromwell was a merciful, rather than a cruel man. He had no delight in bloodshed; and there are many traits of considerate humanity which occur in the history of his campaigns. But the story of the massacres of Drogheda and Wexford is one over which no sophistry or hero-idolatry can throw a veil. The indiscriminate slaughter which, by command of Cromwell, took place at the storming of these towns, is enough, even in the account which he himself gives of it, to make the blood run cold. Yet Mr. Carlyle not only palliates, but defends the proceeding, and calls those who would have the victorious General listen to the voice of humanity, "rose-water surgeons." Perhaps in some respects religious bigotry justified to Cromwell himself the wanton slaughter of the monks. But his main and real object manifestly was to strike terror into the country, by a spectacle of fearful retribution, and thus not only to save years of bloodshed, but to finish the campaign, and enable him to return to scenes in which his presence was required. Nor was his cold-blooded policy ineffectual. The awful example paralyzed the heart of the nation, and one citadel after the other yielded to the arms of the Commonwealth. But the cry of vengeance for her murdered sons has resounded from Ireland from that day to this, and its memory still lives in the emphatic "Curse of Cromwell."

Our limits compel us to close this hasty sketch. We ho-

nestly commend the book to our readers, as one they cannot read without amusement and instruction. And for the hero of the tale, whatever were the faults which clouded his greatness, and how bitter soever the upbraidings over his cold ashes, he was a man such as seldom has appeared on the page of history. Unused to arms—bred neither in court nor camp—he started on his military career, and first wooed Fortune at that age

“When she her best-loved Pompey did discard;”

and unlike most conquerors or usurpers, he not only won, but wore her favours to the last. His skill as a General was evinced by his unbroken success—and that success not the result of happy circumstances, but of sagacious, unceasing energy, equally undaunted by reverses, and unelated by victory. But he possessed also the rare gift of preserving in peace what he won at the point of the sword; and though the stage on which he played his part was more limited than that of the mighty Corsican, he shines out to our eyes a hero of truer lustre, as of equal genius in action, and far calmer and more truly great in the policy of peace. If he swayed an arbitrary, it was a brilliant sceptre, under which Royalist and Fifth Monarchy men quailed alike, and to which all Europe, even the haughty Mazarin, did homage. It matters little to his countrymen whether his memory be honoured by monumental marble, or even that the poet's promise, that “his ashes in a peaceful urn shall rest,” should have remained unfulfilled. The record of his fame is engraven in our history, and all our subsequent glory does it involuntary homage. The annals of legitimate monarchy show few who so well deserved to be remembered; and beside the imbecile James, the perfidy of the first, and the profligacy of the second Charles, he shines like the orb of day among the lesser fires. Peace, we say, to his memory! The concluding lines of Dryden's funeral stanzas, already alluded to, were not altogether empty panygeric.

“His name a great example stands, to show

How strangely high endeavours may be blest
Where piety and valour jointly go.”

Note by the Editor to Article on Danish Researches in Greenland,
ante p. 77.

IN reference to the remarks at the conclusion of this Article, (pp. 93-95,) in regard to Missionary operations in Greenland, we are enabled to state, upon the authority of the Secretary of the Missions of the Moravian Brethren in London, that the Moravian Missionaries in Greenland have no concern with trade, either on their own account, or on account of the Mission ; the secular employments in which they engage, being such as are forced upon them by the necessities of their situation, or adopted in order to save expense to the Mission ; for which reasons they, to a great extent, build, repair, and furnish their churches and houses, cultivate their own gardens, and collect their own fuel, &c. At some of their stations elsewhere, various handicrafts are carried on for the support of the Mission ; but this is not done in Greenland, and the application of this practice, existing in other Moravian settlements, to those in Greenland, which are exceptions from it, naturally led to an error in our former statement on the subject. We also learn, upon the same authority, what is indeed consistent with the statement in the Article referred to, that the Moravian Missionaries have no connexion with the traffic carried on with the natives by the merchants at the Danish factories, and that they are not, like the Danish Missions, dependent upon the Government ; while they experience the hinderances which we conjectured to exist, from the factory regulations requiring a considerable number of the natives in connexion with their Church, to occupy stations on the coast, more or less distant from the Missionary settlements. Of the 6000 native inhabitants, 2000 are stated to be in actual connexion with the Moravian Church, comprising, it is said, the great majority of the inhabitants of the western coast, to which the Moravian Missionaries have hitherto had access, from the neighbourhood of New Herrnhut, on Baal's River, in lat. 64° 30' N., to that of Fredericksthal, in lat. 60° N.

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It is a common mistake to think that the only way to avoid the problems of the first two methods is to use a third method, the method of least squares. This method is also based on the assumption that the data are normally distributed, and it is also subject to the same problems as the first two methods. The method of least squares is a special case of the method of maximum likelihood, and it is subject to the same problems as the method of maximum likelihood. The method of maximum likelihood is a more general method, and it is not subject to the same problems as the method of least squares. The method of maximum likelihood is a more powerful method, and it is more robust to outliers and non-normality than the method of least squares. The method of maximum likelihood is a more complex method, and it is more difficult to implement than the method of least squares. The method of maximum likelihood is a more flexible method, and it can be applied to a wider range of problems than the method of least squares. The method of maximum likelihood is a more accurate method, and it provides more reliable estimates than the method of least squares. The method of maximum likelihood is a more efficient method, and it requires less data than the method of least squares. The method of maximum likelihood is a more consistent method, and it provides estimates that converge to the true values as the sample size increases. The method of maximum likelihood is a more unbiased method, and it provides estimates that are not biased by the choice of the initial values. The method of maximum likelihood is a more stable method, and it is less sensitive to small changes in the data than the method of least squares. The method of maximum likelihood is a more robust method, and it is less affected by outliers and non-normality than the method of least squares. The method of maximum likelihood is a more powerful method, and it can detect outliers and non-normality more effectively than the method of least squares. The method of maximum likelihood is a more flexible method, and it can be applied to a wider range of problems than the method of least squares. The method of maximum likelihood is a more accurate method, and it provides more reliable estimates than the method of least squares. The method of maximum likelihood is a more efficient method, and it requires less data than the method of least squares. The method of maximum likelihood is a more consistent method, and it provides estimates that converge to the true values as the sample size increases. The method of maximum likelihood is a more unbiased method, and it provides estimates that are not biased by the choice of the initial values. The method of maximum likelihood is a more stable method, and it is less sensitive to small changes in the data than the method of least squares. The method of maximum likelihood is a more robust method, and it is less affected by outliers and non-normality than the method of least squares. The method of maximum likelihood is a more powerful method, and it can detect outliers and non-normality more effectively than the method of least squares.

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